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GENITALE PROLAPS BY DIE BANTOE

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In die verlede was dit die opvatting aan die noordelike Mediese Skole van Suid-Afrika, dat genitale prolaps veel minder voorkom onder die suiwer Bantoe-bevolking as onder die blanke bevolking van Suid-Afrika. Elke ginekologiese huisdokter het sekerlik gou besef dat die ginekologiese toestande wat in die naturelle-afdelings voorkom, heelwat verskil van die ginekologiese toestande wat in blanke afdelings gesien word. Toestande wat relatief dikwels onder die naturelle voorkom is bekkeninfeksies, besonder groot fibro-myomata van die uterus, derdegraadse perineale skeure en vesico-vaginale fistils, terwyl onder blankes minder van hierdie toestande gesien word; by die blankes gaan selde 'n operasiedag verby sonder tenminste een of meer colporrhaphie of Fothergill operasies op die operasielys.

Mediese praktisyns het al die bewering gemaak dat genitale prolaps gladnie onder die naturel voorkom nie, en aan die ander kant het mens ook al die opmerking gehoor dat die toestand meer dikwels voorkom as wat algemeen aangeneem word. Hierdie onderwerp is tot dusver in die literatuur verwaarloos, alhoewel Morison [1] meld dat genitale prolaps seldsaam is onder die naturelle van Nigerië.

Om meer sekerheid omtrent die onderwerp te kry het ek die ginekologiese opnames en die operasies aan die Pretoriase Hospitaal oor 'n vyfjaar tydperk (1945 tot 1949) nagegaan. Onder genitale prolaps word die volgende toestande ingesluit: cystocoele, rectocoele, urethrocoele, enterocoele en descensus uteri.

'n Vergelyking tussen die Ginekologiese Opnames in die Blanke en Naturelle-afdelings aan die Pretoriase Hospitaal. Gedurende die vyf jaar (1945 tot 1949) is 'n totaal van 6,302 blanke ginekologiese pasiënte opgeneem, waarvan 410 pasiënte geopereer is vir prolaps—'n voorkoms van 6.5%. In dieselfde tydperk was daar 3,478 Bantoe ginekologiese opnames, met 21 operasies vir prolaps (waaronder twee gevalle van procidentia)—'n voorkoms van 0.6% (Tabel 1).

Alhoewel dit duidelik blyk dat tien keer minder operasies vir prolaps onder naturelle-pasiënte gedoen word as onder blanke pasiënte, kan daar geargumenteer word dat die Bantoe-vrou prolaps ontwikkel maar dat sy nie aanklop vir behandeling nie of dat sy operasie weier. Dit is waar dat 'n naturel nie so gou met minderwaardige klagtes 'n dokter sal raadpleeg nie, tog geld dit vir alle ginekologiese toestande en nie net vir prolaps nie. Dit behoort dus nie die verhouding van operasies tot opnames tot enige belangrike mate te beïnvloed nie. By die Ginekologiese Buitepasiënte Afdeling is in 1948-1949 altesaam 1,955 blanke en 3,569 Bantoe *nuwe* pasiënte gesien, d.w.s. byna tweemaal soveel Bantoe as blankes, en gedurende hierdie tydperk het die staf besonder aandag daaraan geskenk om gevalle van prolaps onder die naturelle te vind, dog sonder veel sukses. By ginekologiese ondersoek was dit roetine om die pasiënt te laat afdruk voor die vaginale ondersoek gedoen is, tog was dit 'n seldsaamheid om selfs 'n klein cystocoele of rectocoele te vind. Die indruk wat mens

TABEL I: PRETORIASE HOSPITAAL: 1945 TOT 1949.

		1945	1946	1947	1948	1949	Totaal	Voorkoms
Blanke Pasiënte ..	Ginekologiese opnames ..	989	1,015	1,136	1,496	1,666	6,302	6·5%
	Operasies vir prolaps ..	79	52	91	88	100	410	
Bantoe Pasiënte ..	Ginekologiese opnames ..	517	638	656	804	863	3,478	0·6%
	Operasies vir prolaps ..	6	2	6	1	6	21	

by die buitepasiënte-afdelings kry is dat die naturelle 'n baie stewiger bekkenvloer as blankes besit.

Die voorkoms van prolaps in Bantoe-pasiënte in ander dele van Suid-Afrika. Omdat dit as 'n moontlikheid beskou is dat die seldsaamheid van prolaps onder naturelle by Pretoria 'n *plaaslike* rasse-eienaardigheid kon wees, is 'n poging aangewend om die voorkoms van die toestand in ander dele van Suid-Afrika vas te stel. Vir dié doel is die medewerking van mediese praktisyns met ondervinding van naturelle-praktyk in ander dele van die land, aangevra. 'n Vraagbrief is opgestel, maar aangesien dit nie billik sou wees om akkurate statistieke te verwag nie, is die geneeshere net vir hulle algemene indrukke omtrent die saak gevra. Die meerderheid van die antwoorde, afkomstig uit Johannesburg, Durban, Oos-Londen, Salisbury, die Transkei, Swaziland en Nyassaland, het gemeld dat die toestand as seldsaam onder die naturel beskou word. Antwoorde afkomstig uit Pietersburg en Bechuanaland het gemeld dat prolaps algemeen voorkom maar dat min pasiënte geopereer word omdat hulle operasie weier; ander antwoorde uit dieselfde distrikte het te kenne gegee dat prolaps seldsaam is. Waarskynlik varieer die voorkoms van prolaps in verskeie areas en onder verskillende stamme. Dit moet beklemtoon word dat bogenoemde menings grootliks op algemene indrukke gebaseer was en dit is welbekend dat algemene indrukke berug foutief mag wees; tog is dit waardevol om te dien as leidraad vir verdere ondersoek.

By die Sir Henry Elliot Hospitaal te Umtata was daar oor 'n tweejaar periode (1947-1948) 415 Bantoe ginekologiese opnames, maar slegs twee operasies vir prolaps is gedoen—'n voorkoms van 0.5%.

Prolaps onder ander Gekleurde Rasse. Die Kleurling- en Indiër-gemeenskap in Pretoria distrik is te klein om volgens hospitaal-statistieke tot definitiewe gevolgtrekkings te kom. Nieteenstaande die relatief kleinheid van hierdie gemeenskappe, is daar heelparty gevalle van prolaps opgemerk. Die gevalle van genitale prolaps wat by die Nie-blanke Buitepasiënte-kliniek voorgekom het, het gewoonlik geblyk 'n Indiër- of Kleurling-pasiënt te wees.

In Nigerië het Morison [1] prolaps seldsaam gevind onder die inboorling-bevolking. In Indonesië beskou Prawirohardjo [2] prolaps meer seldsaam as onder blankes en oor 'n vyfjaar periode het hy gevind dat onder 1,252 Indonesiër ginekologiese opnames die voorkoms van prolaps 1.8% was en onder 136 blanke opnames 8%. Tereg beskou hy hierdie reeks gevalle as te klein vir definitiewe gevolgtrekkings maar stateer dat dit sy algemene indrukke bevestig. In Japan het Nakagwa [3] die voorkoms van genitale prolaps as 2.5% aangegee.

Dit is dus duidelik dat die voorkoms van gewone prolapstoestande onder verskillende rasse wissel. In ons land het ons twee groepe onder wie die verskil baie opmerklik is.

Daar is egter 'n toestand wat definitief as 'n prolapstoestand beskou moet word, wat, sover ek weet, selde onder blankes voorkom,[4] maar wat betreklik dikwels onder die Bantoe aangetref word, nl. postpartum prolaps. Dit word hieronder beskryf.

Postpartum Prolaps onder die Bantoe. Aan die Pretoriase Hospitaal is daar, in die vyf jaar onder bespreking, 22 buitengewone gevalle van postpartum prolaps van die uterus, in die Bantoe, opgeneem. Nege van die gevalle is ingestuur met die foutiewe diagnose van ‚postpartum inversie van die uterus'. Hierdie pasiënte is almal in die hospitaal opgeneem van een tot drie dae na 'n bevalling en by elkeen het 'n dik edemateuse soms amper nekrotiese cervix by die vulva uitgehang (Fig. 1 en 2). Daar was geen geskiedenis van klagte van prolaps voor die swangerskap of voor die bevalling nie. 'n Siekte-geskiedenis wat as tipies vir die hele reeks gevalle beskou kan word, word hier weergegee:

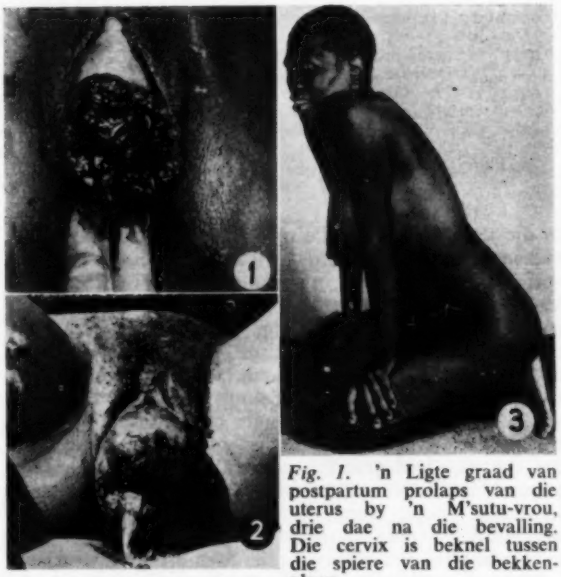

Fig. 1. 'n Ligte graad van postpartum prolaps van die uterus by 'n M'sutu-vrou, drie dae na die bevalling. Die cervix is beknel tussen die spiere van die bekkenvloer.

Fig. 2. 'n Groot mate van postpartum prolaps van die uterus by 'n M'sutu-vrou, 24 uur na die bevalling. Vliese hang by die edemateuse os van die cervix uit. Die pasiënt is na die hospitaal verwys as inversie van die uterus.

Fig. 3. 'n M'sutu-vrou wat postpartum prolaps van die uterus gehad het, demonstreer die postuur wat tydens al drie stadia van kraam ingeneem word tuis onder haar stam.

VERSLAG VAN GEVAL

R. S., 'n volwasse M'sutu-vrou, ongeveer 32 jaar oud, para sewe, is op 9 September 1947, met die diagnose van ‚inversie van die uterus' opgeneem. Sy het haar sewende bevalling 20 uur voor opname gehad, na 'n kraam wat agt uur geduur het. Die bevalling was normaal en die nageboorte het kort na die geboorte van die kind gevolg, maar daarop het 'n ander massa ook by die vulva uitgesak wat haar veel pyn gegee het en waarvoor mediese hulp ingeroep is. Die bevalling het tuis plaasgevind en die posisie wat sy ingeneem het gedurende baring was die gebruiklike een vir haar, nl. op die *knieë*. Die pasiënt het ontken dat daar enige druk op die buik of traksie aan die naelstring uitgeoefen is.

By ondersoek was die pasiënt se algemene toestand bevredigend maar 'n groot geswelde en edemateuse cervix, die grootte van 'n lemoen en bedek met etterige materiaal, het omtrent twee duim by die vulva uitgehang; die cervix was tussen die spiere van die bekkenvloer beknel. Die uitwendige os was in die middel van die cervix te sien. Die cervix is skoongemaak, met sulphonamide poeier bestrooi en in die vagina teruggedruk waarna die uterus abdominaal gevoel kon word. Die pasiënt het prophylacties chemotherapie gekry maar het geen koors ontwikkel nie, en is agt dae later ontslaan.

BESPREKING

Gewone Prolapstoestande. Genitale prolaps is vandag besonder algemeen onder blanke vrouens soos uit die syfers blyk dat, oor 'n tydperk van vyf jaar, meer as 400 vrouens in Pretoriase Hospitaal operasie daarvoor ondergaan het. Dit is moontlik dat die toestand steeds meer voorkom. Die feit dat Bantoe-vrouens in Pretoria nie so geneig is om die toestand te ontwikkel nie laat mens onwillekeurig dink of daar nie faktore by hulle is wat op blankes in die voorkoming van die toestand toegepas kan word nie. Die naturel is aan menige van die bekende etiologiese faktore van prolaps onderworpe, soos bv. multipariteit, kraamletsels, perineale skeure, vroeë swaar liggaamlike arbeid en ondervoeding—miskien nog meer as blankes.

My persoonlike mening is dat die naturel 'n konstitusionele meerderwaardigheid besit ten opsigte van prolaps, met 'n goeie gehalte bindweefsel en deeglike involusievermoë. Moontlik speel postuur 'n rol aangesien die naturellevrou gewigte op haar kop en kinders op haar rug dra in plaas van in die arms. Dit mag wees dat hulle metodes van kraam, waar die knielende posisie ingeneem word, meer doeltreffend is as die beskaafde dorsale of laterale posisie waar die fetale skedel soms lank teenaan die bekkenvloer druk. Smout en Jacoby [5] beskryf die meganisme van defaekasie en die van baring as baie eenders. 'n Blanke vrou sal nie vir die proses van defaekasie op haar rug gaan lê nie, tog wanneer sy 'n baie soortgelyke funksie moet verrig so as baring neem sy die dorsale of laterale posisie in. Keller en Ginglinger [6] beweer dat vroeë opstaan in die puerperium 'n faktor is in die voorkoming van prolaps, of miskien is die relatief kleiner Bantoe bekken 'n faktor van belang.[7]

Op die huidige stadium is daar nog geen duidelike verklaring waarom gewone prolaps seldsamer onder die Bantoe sou wees nie, maar daar word gehoop dat hierdie artikel verdere belangstelling in die onderwerp sal aanmoedig. Dit sou ook interessant wees om te sien of Bantoe-prolaps mettertyd meer algemeen word indien die naturel meer en meer die blankes se gewoontes en lewenswyse aanneem.

Bantoe Postpartum Prolaps. Dit skyn asof hierdie tipe prolaps in naturelle-vrouens algemeen voorkom, en dat dit voorkom in naturelle-vrouens wat nie voor die bevalling 'n neiging tot prolaps gehad het nie. Opvolg van gevalle onder die naturelle is moeilik, maar in twee pasiënte wat na ses weke vir kontrole teruggekom het, het die uterus goeie involusie getoon en daar was geen oorblywende teken van prolaps nie. 'n Belangrike faktor in die etiologie van die postpartum prolaps is die knielende posisie wat naturelle-vrouens tuis tydens baring inneem [8] met die feit dat hulle reeds vroeg in die eerste stadium afdruk. Verhoogde intra-abdominale druk voordat die cervix ontsluit is, saam met die gewig van die vertikale uterus en kind veroorsaak rekking van die kardinale en utero-sakrale bande deurdat die orgaan as 'n geheel afgepers word (Fig. 3).

Ook in verband met hierdie interessante toestand van postpartum prolaps is verdere waarnemings nodig. Gelukkig is dit 'n toestand waarvan die voorkoming en behandeling betreklik eenvoudig is.

OPSOMMING

1. Genitale prolaps en selfs procidentia kom wel onder die ‚suiwer' Bantoe voor.

2. Operasies vir genitale prolaps is 10 keer seldsamer onder Bantoe as onder blanke ginekologiese opnames in die Pretoriase Hospitaal.

3. Prolaps onder naturelle is ook in ander dele van Suid-Afrika seldsamer as onder blankes, maar waarskynlik wissel die voorkoms in verskillende areas en onder verskeie stamme.

4. Postpartum genitale prolaps met beknelling van die cervix tussen die spiere van die bekkenvloer, kom relatief algemeen onder naturelle voor. Sulke gevalle word dikwels na die hospitaal gestuur met die foutiewe diagnose van ‚postpartum inversie van die uterus'.

'n Geval van postpartum prolaps word beskryf.

Graag wil ek my erkenning uitspreek teenoor prof. L. J. te Groen, dr. W. Waks, die superintendent van die Pretoriase Hospitaal, die superintendent van die Umtata Hospitaal, en die praktisyns en ginekoloë wat my met nuttige informasie voorsien het.

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5. Smout, C. F. V. en Jacoby, F. (1948): *Gynaecological and Obstetrical Anatomy,* 2nd ed., bl. 60. London: Edward Arnold & Co.
6. Keller, R. en Ginglinger, A. (1948): Gynéc. et Obst., **47,** 311.
7. Miller, C. J. (1947): Davis' *Gynaecology and Obstetrics,* II, 8, 32. Hagerstown: W. F. Prior Co., Inc.
8. Morris, B. (1938): S. Afr. Med. J., **12,** 887.

ABSTRACTS

Investigation of Contact-Type Dermatitis due to Compound Tincture of Benzoin. Steiner, K. and Leifer, W. (1949): J. Invest. Derm., **13,** 351-359.

Although Compound Tincture of Benzoin has been used for centuries, only one previous report of dermatitis following its use has been found.

Three cases of acute dermatitis following the use of Compound Tincture of Benzoin in combination with adhesive tape dressings are described. Tests were carried out on ten control patients with skin diseases, mostly of allergic nature, and two were readily sensitized to the tincture. Similar tests on 20 controls without skin or allergic manifestations produced no sensitization. Detailed testing with constituents of Compound Tincture of Benzoin makes it seem probable that volatile oils and/or resins may be responsible for the dermatitis. The tincture and its constituents should not be used on patients with an allergic disease or a history of allergy.

The Hypospray and its Relation to Dermatology. Larvick, L. E. and Thompson, R. G. (1949): J. Invest. Derm., **13,** 361.

The hypospray apparatus, its mode of action and use in a variety of dermatoses requiring the injection of local anaesthetics, antibiotics, etc., are described. The advantages in its use are that pain is less than with a 26-gauge needle; consent for minor operations is easily obtained as no needle is used; danger of local infection is lessened; there is minimal danger of damage to important structures; it is time-saving; and the medicament can be placed directly into the area requiring high concentration of the agent. Disadvantages are that multiple injections may be required for large areas; it cannot be used in body cavities; lacerations may (rarely) be produced; infections may occur if greasy preparations are used locally; noise frightens some patients; and pain follows use about nails, fingertips and scalp.

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VAN DIE REDAKSIE

DIE OORERWING VAN VALLENDE SIEKTE

Sommige ondersoekers gee te kenne dat idiopatiese epilepsie as 'n enkele resessiewe Mendeliaanse eienskap oorgedra word.[1] Ander is van mening dat niespesifieke potensiale vatbaarheid vir vallende siekte geërf word. Volgens hierdie mening kom aanvalle van trekkings by die vatbare persoon voor slegs wanneer sekere prikkelende omgewingsfaktore in werking is.[2]

Dit was lank reeds vir klinici duidelik dat sekere families 'n ‚neiging' tot vallende siekte het. Uit hierdie waarneming is dikwels afgelei dat epileptici aangeraai moet word om nie te trou nie. Die versigtige geneesheer is egter maar te bewus dat hy nie 'n hindernis in die weg van 'n huwelik kan lê tensy hierdie ernstige raad op 'n vaste feitegrondslag berus nie.

Die probleem ontstaan gereeld wanneer 'n lyer aan vallende siekte of iemand in wie se familie baie gevalle van hierdie ongesteldheid voorkom, raad vra in verband met 'n huwelik. Die navraer verwag om by sy geneesheer uit te vind watter kans daar is dat die ongesteldheid op sy kinders oorgedra word. 'n Gesonde persoon in 'n familie van epileptici wil weet of sy afstammelinge geraak sal word.

In die eerste plek moet daar vasgestel word dat die aanvalle van trekkings wat die pasiënt kry, idiopaties is en nie simptome van 'n opgedoende letsel is nie. Indien plaaslike beskadiging van die brein die oorsaak is, ontstaan daar geen probleem van genetiese oordrag nie. Die eerste belangrike beslissing is dus dat die aanvalle nie aan 'n opgedoende siekte-oorsprong te wyte is nie.

'n Poging moet dan aangewend word om die relatiewe belangrikheid van die oorgeërfde vatbaarheid te bepaal deur ondersoek in te stel na die aantal ander lede van die familie by wie tekens van vallende siekte waarneembaar is. Daar is bereken dat die lyer aan vallende siekte se kans om die siekte op sy afstammelinge oor te dra ongeveer 1:10 is; m.a.w. in so 'n gesin van 10 kinders is dit waarskynlik dat een aan vallende siekte sal ly.

Daar is proefondervindelik aangetoon dat hierdie waarskynlikheid groter of kleiner is volgens die algemeenheid van die siekte in die familie. En daar is 'n mate van statistiese bewys dat die epileptiese kind vroeg in die gesin sal voorkom.[3]

Sekere addisionele en bepaalde feite is vasgestel. Dit is bekend dat vallende siekte 'n paroksismiese wan-

1. Penfield, W. en Erickson, T. C. (1941): *Epilepsy*, bl. 309. Springfield: Charles C. Thomas.
2. Burr, C. W. (1922): *Arch. Neurol. Psychiat.*, **7**, 721.
3. Brain, W. Russell, *Chances of Morbid Inheritance. Ed. by Blacker, C. P.* Londen: H. K. Lewis & Kie.

EDITORIAL

THE INHERITANCE OF EPILEPSY

Some investigators suggest that idiopathic epilepsy is transmitted as a single recessive Mendelian character.[1] Others are of the opinion that a non-specific potential vulnerability to epilepsy is inherited. According to this view convulsive seizures occur in the predisposed person only when certain exciting environmental factors operate.[2]

It has long been apparent to clinicians that certain families have a 'tendency' to epilepsy. From this observation it has often been concluded that epileptics should be advised not to marry. However, the cautious medical practitioner is only too well aware that he cannot admit an impediment to marriage unless this grave advice rests on a firm basis of fact.

The problem arises constantly when counsel is sought by an epileptic regarding marriage or by one who has in his family a strong history of this disorder. The enquirer expects to discover from his physician what risk there is of transmitting the disorder to his children. A healthy person in a family of epileptics wants to know if his offspring may be affected.

In the first place it must be established that the convulsive seizures experienced by the patient are idiopathic and not symptomatic of an acquired lesion. If localized cerebral damage is the cause, the problem of genetic transmission does not arise. The first important decision to be made, therefore, is that the seizures are not due to an acquired focus of disease.

An attempt must then be made to assess the relative importance of the inherited predisposition by enquiry into the occurrence of epileptic manifestations in other members of the family. It has been calculated that the epileptic's risk of transmitting the disorder to his offspring is about 1:10; i.e. in such a family of 10 children, one is likely to have epilepsy.

Empirically this likelihood has been shown to be greater or less according to the familial prevalence of the disease; and there is some statistical evidence that the epileptic child will occur early in the family.[3]

Certain additional and definite facts have been established. It is known that epilepsy is a paroxysmal

1. Penfield, W. and Erickson, T. C. (1941): *Epilepsy*, p. 309. Springfield: Charles C. Thomas.
2. Burr, C. W. (1922): Arch. Neurol. Psychiat., **7**, 721.
3. Brain, W. Russell, *Chances of Morbid Inheritance*. Ed. by Blacker, C.P. London: H. K. Lewis & Co.

ritme van die brein is. Die elektriese aktiwiteit van die brein kan deur die ongeopende skedel deur middel van die elektro-encephalograaf bestudeer word en kenmerkende golfpatrone word van epileptiese persone verkry, of hulle aanvalle gekry het al dan nie.

Daar is aangetoon dat die breingolfpatroon 'n erflike eienskap is. 'n Persoon wat aan vallende siekte ly is dus in staat om sy wanritme van die brein op sy kinders oor te dra. Die moontlikheid van hierdie oordrag skyn in albei geslagte gelyk te wees. ‚Die aanwesigheid van abnormale breingolwe by die ouers van epileptici is vermoedensgetuienis dat die wanritmes van die brein wat met vallende siekte in verband gebring word, oorerflik is en dat ouers wat sulke wanritmes van die harsingskors het, „draers" van die ongesteldheid is'.[4]

Daar is dus aan die hand gegee dat indien beide partye by 'n huwelik abnormale breingolwe het, hulle nie kinders behoort te hê nie—so sterk is die moontlikheid dat hulle afstammelinge aan vallende siekte sal ly.

Bestudering van die genetiese agtergrond van vallende siekte vorm nog die onderwerp van intensiewe ondersoek. Daar is drie maniere om die erflikheidspatroon van hierdie ongesteldheid of, op die keper beskou, van enige verskynsel wat deur erflike faktore geraak word, na te gaan.

i. *Die Stamboommetode.* Dit toon die opeenhoping van epileptici in opeenvolgende geslagte.

ii. *Die Gebeurlikheidsmetode van Statistiese Voorspelling.* Dit bring aan die lig of 'n afwyking meer dikwels by bloedverwante voorkom as wat van die verspreiding van die eienskap by 'n steekproef van die bevolking verwag kan word. Al sulke ondersoeke toon dat vallende siekte veel meer dikwels by bloedverwante van epileptiese gevalle voorkom as by die gewone bevolking.

iii. *Die Metode van Tweelingbestudering.* Dit is die doeltreffendste genetiese metode. Die frekwensie van trekkings soos dié van vallende siekte word in die geval van di-sigotiese (nie-identiese) en monosigotiese (identiese) tweelinge vergelyk. Di-sigotiese tweelinge is geneties nie meer eenders as enige ander twee broers of susters wat op verskillende tye gebore is nie.

Lennox[5] het met gebruik van hierdie metode aangetoon dat epileptiese aanvalle by albei van die tweeling voorkom in 86% van die monosigotiese gevalle terwyl by disigotiese tweelinge aanvalle by albei lede slegs in 6% van die pare voorkom. Dit bevestig die belangrikheid van genetiese faktore by die ontstaan van vallende siekte.

In die lig van huidige kennis kan die volgende raad aan 'n epileptiese persoon gegee word wat huweliksvoorligting verlang. Indien sy aanvalle hom onbekwaam maak en hulle swak reageer op sorgvuldige gebruik van medisyne, is hy klaarblyklik om ekonomiese en sosiale redes alleen ongeskik om 'n gesin te hê. Indien hy nie ernstig ongeskik gemaak word deur die ongesteldheid nie, is die algemeenheid van vallende siekte onder sy familiebetrekkinge 'n aanduiding dat die ongelukkige moontlikheid bestaan dat sy kinders vallende siekte kan

4. Lennox, W. G., Gibbs, F. A. en Gibbs, E. L. (1939): *J. Amer. Med. Assoc.*, **113,** 1002.
5. Lennox, W. G. (1947): *Res. Publ. Assoc. Nerv. Ment. Dis.*, **26.**

cerebral dysrhythmia. The electrical activity of the brain may be studied through the unopened skull by the electroencephalograph and characteristic wave patterns are obtained from epileptic persons, whether or not they have experienced seizures.

The brain wave pattern has been shown to be an hereditary trait. An epileptic is therefore able to transmit his cerebral dysrhythmia to his children. The probability of this transmission appears to be equal in the two sexes. ' The presence of abnormal brain waves in the parents of epileptics is presumptive evidence that the cerebral dysrhythmias associated with epilepsy are inheritable, and that parents who show such cortical dysrhythmia are " carriers " of the disorder '.[4]

It has therefore been suggested that, if both partners to a marriage have abnormal brain waves, they should not have children, so great is the chance that their offspring will be epileptic.

Investigation of the genetic background of epilepsy is still the subject of intensive enquiry. There are three ways of tracing the hereditary pattern of this disorder or, for that matter, of any other anomaly affected by hereditary factors: —

i. *The Pedigree Method.* This illustrates the accumulation of epileptics in successive generations.

ii. *The Contingency Method of Statistical Prediction.* This discloses whether an anomaly occurs more frequently in blood relatives than is to be expected from the distribution of the trait in a random sample of the population. All such investigations show that epilepsy occurs much more frequently in blood relatives of epileptic cases than it does in the general population.

iii. *The Twin Study Method.* This provides the most effective genetic procedure. The frequency of epileptiform convulsions is compared in dizygotic (non-identical) and monozygotic (identical) twins. Dizygotic twins are genetically no more alike than any other pair of brothers or sisters born at different times.

Lennox,[5] using this method, has shown that epileptic seizures occur in both co-twins in 86% of cases when they are monozygotic, whereas among dizygotic twins both members have seizures in only 6% of the pairs. This confirms the great importance of genetic factors in the development of epilepsy.

In the light of present knowledge the following advice may be given to the epileptic person seeking marital guidance. If his seizures are a disabling factor, responding poorly to careful medication, he is clearly unfitted to have a family on economic and social grounds alone. If he is not severely disabled by the disorder, the prevalence of epilepsy amongst his relatives indicates that his children have the unfortunate

4. Lennox, W. G., Gibbs, F. A. and Gibbs, E. L. (1939): J. Amer. Med. Assoc., **113,** 1002.
5. Lennox, W. G. (1947): Res. Publ. Assoc. Nerv. Ment. Dis., **26.**

ontwikkel. Sy voorgenome vrou moet dus nie aan vallende siekte ly nie en sy moet ook nie gevalle van vallende siekte in haar familie hê nie. Onder ideale omstandighede moet daar elektro-encephalografiese bewys wees dat sy vry van wanritme van die brein is.

STERILISERING EN DIE PROBLEEM VAN VALLENDE SIEKTE

Verpligte sterilisering van aangetastes is voorgestaan as 'n middel om die oordrag van vallende siekte te beperk en hierdie siekte uit te roei. Ons wetenskaplike kennis van idiopatiese epilepsie regverdig nie sulke drastiese raad nie. In elke geval, voordat eugeniese terapie van hierdie aard oorweeg kan word, sal 'n baie noukeurige erflikheidsgrondslag vir vallende siekte bepaal moet word. Die belangrikste vereiste is die bevordering van die studie van die erflikheidsleer.

Selfs wanneer eenvoudig aangeneem word dat vallende siekte oorgedra word deur middel van 'n enkele resessiewe geen, is daar bereken dat verpligte sterilisering maar 'n klein merkbare vermindering van die voorkomssyfer van die ongesteldheid in minder as 'n duisend jaar sal meebring.[6]

Sjorgren het in Swede 'n indringende ontleding van jeugdige amaurotiese familie-swaksinnigheid gemaak. Daar is besliste getuienis wat bewys dat hierdie gebrek aan 'n enkele resessiewe geen te wyte is[7] netsoos in die geval van idiopatiese epilepsie veronderstel word. Aangesien amaurotiese familie-swaksinniges sterf voordat hulle 'n hubare ouderdom bereik, voer die natuur haar eie steriliseringsproefneming uit. Die feit dat daar geen merkbare vermindering van die voorkomssyfer van hierdie gebrek was nie is bewys van die nutteloosheid van verpligte sterilisering as 'n maatskaplike voorbehoedsmaatreël.

Alhoewel daar min ten gunste van verpligte sterilisering as 'n eugeniese tegniek gesê kan word, staan sake heeltemal anders wat die afsonderlike lid van 'n epileptiese familie betref. Indien hy onbetwisbaar 'n lyer aan vallende siekte is, mag hy self oortuig wees van sy ongeskiktheid om 'n ouer te wees. Indien hy skynbaar normal is, mag hy oortuig wees dat die familiegeskiedenis van so 'n aard is dat dit 'n uiters swak prognose vir sy afstammelinge inhou. In beide hierdie gevalle sal onthouding van die huwelik lei tot die verlies van die psigo-seksuele voordele van die huwelikslewe. Aangesien daar geen volmaakte voorbehoedmiddel bestaan nie en aangesien sterilisering deur afsnyding van die saadbuise (of verwydering van die eierleier) 'n betreklike eenvoudige operasie is, sal dit die enigste doeltreffende metode wees om voortplanting te voorkom. Dit skyn dus of daar alle redelike geneeskundige aanduidings is om hierdie operasie in sulke spesiale gevalle toe te laat.

Dit kan maklik wees dat die wet hier vir ons maatskaplike behoeftes aansienlik agter is. Vrywillige sterilisering bloot omdat die pasiënt nie kinders wil hê nie is waarskynlik in hierdie land onwettig en 'n snykundige wat so 'n steriliseringsoperasie doen, loop gevaar om krimineel vervolg te word tensy die operasie

6. Haldane, J. B. S. (1938): *Heredity and Politics*, 2de uitg., bl. 83. Londen: George Allen en Unwin.
7. Sjorgren (1931): *Hereditas*, 14. *Aangehaal deur* Hogben, L. (1931): *Genetic Principles in Medicine and Social Science*. Londen: Williams en Norgate, Bpk.

likelihood of developing epilepsy. His prospective wife must therefore not be an epileptic nor should she have a history of epilepsy in her family. Ideally she should be shown to be free of cerebral dysrhythmia by electro-encephalography.

STERILIZATION AND THE PROBLEM OF EPILEPSY

Compulsory sterilization of the afflicted has been advocated as a means of limiting the transmission of epilepsy and eradicating this disease. Our scientific knowledge about idiopathic epilepsy does not justify such drastic advice. In any event, before eugenic therapy of this type could be considered, a much more precise hereditary basis of epilepsy would have to be determined. The primary necessity is to promote the study of genetics.

Even on the simple assumption that epilepsy is transmitted by a single recessive gene, it has been calculated that compulsory sterilization would make little appreciable inroad on the incidence of the disorder in less than a thousand years.[6]

Juvenile amaurotic family idiocy has been the subject of a searching analysis in Sweden by Sjorgren. There is definite evidence which establishes this disorder as due to a single recessive gene[7] in the same way as has been postulated for idiopathic epilepsy. As juvenile amaurotic family idiots die before they reach the child-bearing age, Nature conducts her own sterilization experiment. The fact that there has been no noticeable decline in the incidence of this disease demonstrates the futility of compulsory sterilization as a social prophylactic measure.

Although there is little that can be said in favour of compulsory sterilization as a eugenic technique, the situation is quite different as far as the individual member of an epileptic family is concerned. If he is a frank epileptic, he may himself be convinced of his unsuitability as a parent. If he is apparently normal, he may be satisfied that the family history is such as to introduce an extremely poor prognosis for his own offspring. In both these cases, denial of marriage will lead to deprivation of the psycho-sexual benefits of matrimony. As there is no perfect contraceptive and as sterilization by vasectomy (or salpingectomy) is a relatively simple surgical procedure, this would be the only effective way of preventing procreation. There seems to be every rational medical indication, therefore, to permit this operation in such special cases.

Here the law may well be lagging very considerably behind our social needs. Voluntary sterilization for the sole reason that the patient wishes to avoid having children is probably illegal in this country and a surgeon who performs such a sterilizing operation risks a

6. Haldane, J. B. S. (1938): *Heredity and Politics*, 2nd ed., p. 83. London: George Allen and Unwin.
7. Sjorgren (1931): Hereditas, 14. *Quoted by* Hogben, L. (1931): *Genetic Principles in Medicine and Social Science*. London: Williams and Norgate Ltd.

klaarblyklik in belang van die pasiënt se gesondheid gedoen word.[8]

Aangesien die steriliseringsoperasie geen aanmerklike verskil maak aan die latente of waarneembare vallende siekte waaraan die pasiënt ly nie, lyk dit of toestemming tot die operasie onwettig is. Die snykundige prosedure self mag op die oomblik onder sulke omstandighede 'n misdaad wees. Ons moderne kennis van die oorerwing van die siekte bring die volslae ondoeltreffendheid van ons gemenereg in hierdie verband aan die lig. Dit is hoogs wenslik dat die afsonderlike lyer toegelaat moet word om van hierdie metode gebruik te maak om te verhoed dat 'n ongewenste erflike eienskap oorgedra word.

8. Kitchin, D. Harcourt (1936): *Legal Problems and Medical Practice*, bl. 32. Londen: Edward Arnold en Kie.

criminal prosecution unless the operation has clearly been done in the interests of the patient's health.[8]

As the operation of sterilization will make no material difference to the latent or manifest epilepsy from which the patient suffers, it seems likely that consent to the operation is illegal. The surgical procedure itself may at present be a crime in such circumstances. Our modern knowledge of the inheritance of disease exposes the complete inadequacy of our common law in this regard. It is highly desirable that the individual sufferer should be permitted to avail himself of this method of preventing the transmission of an undesirable hereditary trait.

8. Kitchin, D. Harcourt (1936): *Legal Problems in Medical Practice*, p. 32. London: Edward Arnold and Co.

ARTHRODESIS OF THE WRIST JOINT

AN ANALYSIS OF 48 OPERATIONS

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This analysis deals with 48 operations (on 46 patients) of arthrodesis of the wrist joint performed by various surgeons, and by various techniques. Only cases following trauma have been included. An attempt has been made to assess which method has proved to be the most satisfactory.

Of these cases 41 were done in the Orthopaedic Service of the Royal Air Force in England. Owing to the difficulty of following up patients who were discharged or demobilised from the Service, the result in each case has been assessed at six months from the date of the operation, although many cases were under observation for much longer than this. More recent experience with civilian cases has shown that the assessment at six months has proved reliable.

The Aim of the Operation of Arthrodesis. The object of the operation is to obtain a strong painless grip without interfering with pronation or supination of the forearm. This is best achieved by sound, bony ankylosis of the radio-carpal and intercarpal joints, without damaging the triangular fibro-cartilage or inferior radio-ulnar joint. The best position of the wrist joint as regards grip is about 35° dorsiflexion with a few degrees of ulnar deviation.

Indications for Operation. In every case in this series the patient's main symptom was *pain* in the wrist joint, usually associated with diminished wrist movement and weakness of grip. These symptoms were due to post-traumatic osteoarthritis in the radio-carpal or intercarpal joints. The causes of the osteo-arthritis in 46 patients were as follows:—

(a) Ununited fracture of the scaphoid in 26 cases (57%).

(b) Comminuted Colles fracture in eight cases (17%).

(c) Kienböcks disease in six cases (13%).

(d) Severe fracture dislocation involving the wrist joint in three cases (6½%).

(e) Gun shot wound in three cases (6½%).

The patients were all males, varying in age from 19 to 47 years.

OPERATIVE TECHNIQUE USED

A pneumatic tourniquet and a dorsal approach to the wrist joint was used in all cases. After denuding the radio-carpal and intercarpal joints of articular cartilage (a tedious, but necessary step), some form of bone grafting was used in every case. The wrist was immobilized in plaster of Paris in all cases. In some the elbow was also immobilized but it is difficult to say whether this has affected the results or not. Theoretically it seems an advantage to do so. The plaster was removed when it was thought there was radiological evidence of bony fusion.

Methods of Bone Grafting Used—1. *Brittain's Technique (21 Cases).* This is essentially an inlay tibial bone graft, preferably curved, with steps cut at each end so as to resemble a cricket bail. The graft is inserted into a longitudinal bone trough, cut from the lower end of the radius as far as the base of the 3rd metacarpal. The graft lies with its greatest width in an antero-posterior plane with the step ends firmly fitted into the radius and base of the 3rd metacarpal respectively. Thus, theoretically the graft can withstand flexion and extension strains better than lateral strains (Brittain's *Architectural Principles in Arthrodesis*).

An accurate fit is possible and no other internal fixation is necessary, making subsequent changes of plaster easy and painless.

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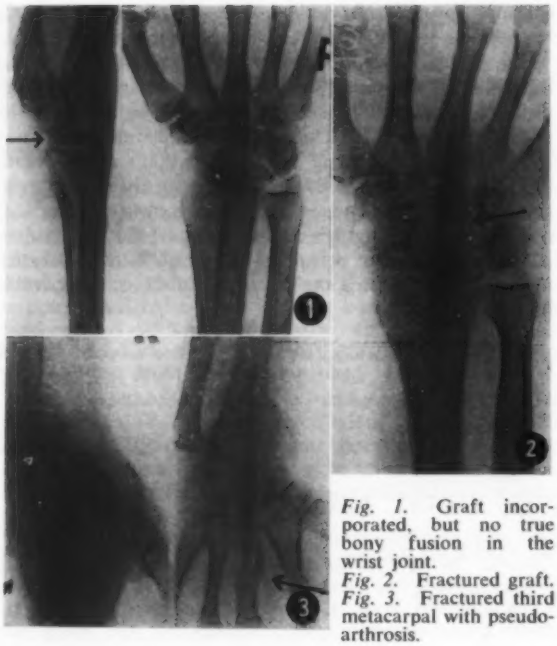

Fig. 1. Graft incorporated, but no true bony fusion in the wrist joint.
Fig. 2. Fractured graft.
Fig. 3. Fractured third metacarpal with pseudo-arthrosis.

However, various disadvantages have been found in this technique apart from the technical difficulty of cutting and inserting the graft. In no case was more than 15° dorsiflexion obtained. In one case a crack fracture of the donor leg resulted some months later. A more serious objection is that in some cases the insertion of the graft seems to have separated the radio-carpal and intercarpal surfaces, so that bony fusion did not result for many months and all strains were taken by the graft alone (Fig. 1). Owing to the firm internal fixation there was no pain to warn the patient or the surgeon that fusion was incomplete, until some excessive strain fractured the graft. This occurred in five cases. It is interesting to note that one such fracture occurred while the patient was fly fishing, i.e. probably due to a lateral strain (Fig. 2). In one case fracture of the base of the 3rd metacarpal occurred with the formation of a pseudoarthrosis at that point (Fig. 3). The average period of immobilization of the uncomplicated cases was 17 weeks.

2. *Onlay Tibial Graft Fixed with Vitallium Screws (Four Cases).* In this technique the graft is laid flat on a prepared bed on the dorsum of the wrist and fixed at each end by a screw into the radius and base of the 3rd metacarpal respectively. If the graft is cut from the lower more curved part of the tibia, an adequate curve can be obtained and the wrist fixed in as much as 35° of dorsiflexion (Fig. 4). In one case subsequent removal of the screws was thought necessary and proved to be difficult.

The graft fractured in one case.

3. *Onlay Iliac Graft.* (i) Fixed with Vitallium Screws (Three Cases); (ii) No Screws (One Case). This technique is similar to that described, but the graft is cut from the outer table of the ilium instead of the tibia.

A good result was obtained in three out of four cases.

4. *Cancellous Iliac Bone Chips (16 Cases).* In this method cancellous bone is removed from the ilium and closely packed into the interstices of the denuded radio-carpal and intercarpal joints. The cancellous bone may be obtained by gouging it out through a hole in the outer table of the ilium at the front thicker portion of the bone. Another method is to cut a wedge of cancellous bone from between the outer and inner tables of the ilium with a broad osteotome, after hinging back the superior cortical edge of the iliac crest. This can be done quickly and easily and no stripping of muscles is needed. A gouge may also be used from this approach if desired. The amount of cancellous bone needed is about enough to fill an egg cup. The bone is crushed into very small pieces and packed into the wrist joint. The joint can easily be placed into any position that is desired. Subsequent changes of plaster must be carefully carried out, but this is a minor difficulty. Sound bony fusion has occurred in all cases but one, and there have been no other complications. The average period of immobilization was 14 weeks (Fig. 5).

5. *Sliding Radial Inlay Graft (One Case).* A graft is cut from the lower half of the radius and slid distally

Fig. 4. Curved onlay tibial graft.

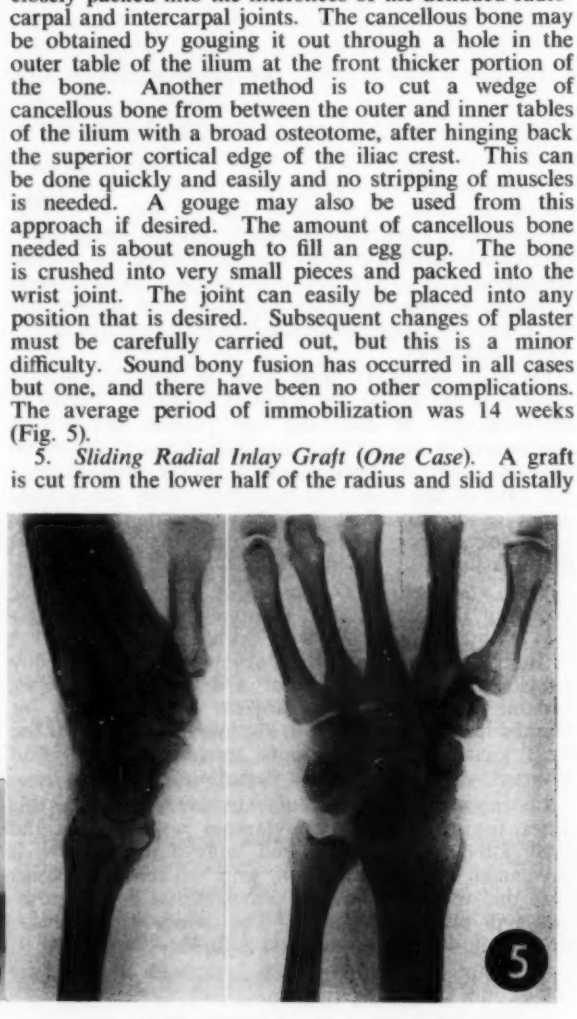

Fig. 5. Cancellous bone graft, at 14 weeks.

into a prepared bed cut in the carpus and fixed in with one vitallium screw at its radial end. Only a small amount of dorsiflexion can be obtained. A good result was obtained in this case.

6. *Bone Chips obtained from the Wrist Joint (One Case).* In this case partial bony fusion of the wrist joint had occurred following a gun shot wound. The remaining carpal bones were crushed up and used as a cancellous bone graft. A good result was obtained.

7. *Using the lower end of the Ulna as Bone Chips (One Case).* Sound radio-carpal fusion was obtained, but pain in the intercarpal joint necessitated fusion of that joint 18 months later by means of iliac chips.

SUMMARY OF RESULTS SIX MONTHS AFTER OPERATION

Good = Strong painless grip and return to full duties.
Fair = Good grip with some aching after strenuous use.
Poor = Pain and weakness of grip persisting.

Technique Used	*No. of Cases*	*Good*	*Fair*	*Poor*
a. Brittain	21	10 (48%)	6 (29%)	5 (23%)
b. Onlay tibial graft	4	2 (50%)	1 (25)%	1 (25%)
c. Onlay iliac graft	4	3 (75%)	—	1 (25%)
d. Cancellous iliac graft	16	11 (69%)	4 (25%)	1 (6%)
e. Sliding radial graft	1	1 (100%)	—	—
f. Local bone chips	1	1 (100%)	—	—
g. Free ulnar graft	1	—	—	1 (100%)
	48	28 (59%)	11 (23%)	9 (19%)

DISCUSSION

In the 48 operations reviewed, there have been 28 good, 11 fair and 9 poor results, estimated at six months from the time of the operation, i.e. 39 cases or 81% were improved by the operation, and nine cases (19%) were not improved.

There have been serious disadvantages in some of the cases treated by Brittain's technique. Five fractured grafts, one fractured metacarpal, and one fractured donor leg in a series of 21 cases, seems too high a complication rate to recommend this method for general use. It is also technically difficult to perform, needing a good motor driven saw with which to cut the graft and bed accurately, and adequate dorsiflexion is difficult to obtain, and in 23% of cases the end result was poor.

In the 16 cases treated by cancellous iliac grafting, there was only one poor result (6%) and no serious complications occurred. The average period of immobilization (14 weeks) was less than in the cases treated by Brittain's method (17 weeks). The operation is easy to perform and no motor saw is needed, and the wrist can be fixed easily in any position required.

The number of cases treated by the other methods described above is too small for any conclusions to be drawn. On the whole they appear to offer no advantages over the cancellous bone technique, and technically are more difficult to perform.

The technique which appears to hold the most advantages as regards bony fusion and ease of performance is that of Cancellous iliac bone grafting.

It is realized that there are other techniques, e.g. osteoperiosteal grafts which are more suitable in certain cases such as tuberculous arthritis of the wrist (Girdlestone), but only post-traumatic cases have been included in this series. It has also been noticed by the author that the results in certain non-destructive diseases of bone, such as post-poliomyelitis cases, the results, by any technique, were very much better than in the post-traumatic cases—probably due to absence of sclerosis and osteoarthritis.

SUMMARY

1. Forty-eight cases of arthrodesis of the wrist joint performed by various techniques, have been compared six months after operation.

2. Thirty-nine patients (81%) were improved by the operation, and nine (19%) were not.

3. It is suggested that the best technique for general use is that of Cancellous iliac bone grafting.

The author wishes to thank all the orthopaedic surgeons of the Royal Air Force Medical Service for most of the material used in this paper, and especially Sir Reginald Watson Jones and Air Commodore H. Osmond Clarke for their constant help and encouragement.

In addition a special word of praise is due to the V.A.D. Clinical Secretaries whose excellent case notes made this study possible.

BRACHIAL PLEXUS BLOCK WITH AMETHOCAINE HYDROCHLORIDE

A REPORT ON 1,000 CASES

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During the last 20 months brachial plexus block has been performed on 1,000 cases at Baragwanath Hospital for non-Europeans. This procedure has been adopted for most operative undertakings on the upper extremity, especially in emergency cases, for the following reasons.

The technique adopted produced good results in a large percentage of cases; the technique, after practice, has been fairly rapid, the whole procedure not taking more than 10 minutes; the majority of emergency cases admitted to this hospital had either eaten a meal recently or were in an acute state of intoxication which increased the dangers of general anaesthesia.

It has also been found (*vide infra*) that one of the commonest injuries to the upper extremity seen in this

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hospital is laceration of the fingers, hand, or wrist by knife blades, resulting in severence of tendons, vessels and not infrequently nerves, which entail long operative procedures for their repair. With our technique, we can be fairly certain of prolonged analgesia without the concurrent detrimental effects of prolonged general anaesthesia. Not infrequently these patients may also have stab wounds in the chest involving the lung and here again brachial plexus block is preferable to general anaesthesia. Finally, we have found that during large emergency intakes where only a limited staff is available, this procedure enables the anaesthetist to attend to other cases after the block has been completed.

THE HISTORY OF BRACHIAL PLEXUS BLOCK

The first record of operative procedures under brachial plexus block is that in 1884 Halsted 'freed the cords and nerves of the brachial plexus, after blocking the roots in the neck with cocaine solution'. For some time after this there is little mention of this procedure in the literature until 1897 when Crile performed a disarticulation of the shoulder joint. The method employed was injection of each nerve trunk, under direct vision, with cocaine.

Just before and during the Great War, the procedure again became popular, but surgeons were avoiding the block under direct vision and were attempting to produce the same effects by the 'blind approach'. Hirchel in 1911 popularized the blind axillary method but this was followed closely by the supraclavicular approach as described by Kulenkampff. The Infraclavicular approach was used by Babitski Bazy, Sherwood-Dunn and Dogliotti and it too had its vogue for a few years.

In the 1920's Gaston Labat published his book on local analgesia and described four routes for producing the block:—

i. The supraclavicular.
ii. The infraclavicular.
iii. The axillary.
iv. The paravertebral.

The latter route has been described in detail by Kappis but it is by far the most difficult of all the methods.

During the next 20 years the procedure was not practised to any great extent until just before World War II when Patrick described a technique for the supraclavicular approach which is the basis for most of the modern methods. During the war, McIntosh and Mushin edited a very useful little book which has done much to popularise this very useful form of analgesia.

Amethocaine Hydrochloride. The drug we have used in our series is Amethocaine Hydrochloride which is Anethaine (Glaxo) or, as it was first described, Pantocain. In England it was known as Dessicain or Butethanol, in the U.S.A. as Pontocaine Hydrochloride and in Russia as Dikain.

Amethocaine Hydrochloride is the hydrochloride of p-butyl-aminobenzol-dimethyl amino ethanol. It is a white powder with a melting point of 149° C. It is water soluble and is extremely resistant to boiling. It is supplied in glass ampoules of 100 mg. The usual strength of solution used is 1:1000, 100 mg. of Amethocaine being dissolved in 100 c.c. of normal saline. To this solution is added 0.5 c.c. adrenaline hydrochloride (1:1000) in order to prolong the action of the drug, to prevent very rapid absorption and to inhibit bleeding at the site of injection.

The solution is lethal for non-sporing organisms and in our series only one case of sepsis has been recorded. The solution is an excellent analgesic agent, is non-irritant to the tissues in the usual dosages and has a more efficient power of penetrating the tissues than Procaine. It gives a prolonged action and in our series we have had analgesia up to five hours.

Recent investigation on the toxicity of Amethocaine by intravenous injection shows relative toxicities of Amethocaine, cocaine and procaine to be 4.5:3:1. This ratio is based upon comparisons of the weight of lethal doses, and must be considered in relation to the much greater analgesic potency of Amethocaine, and the smaller quantities of that substance employed clinically to produce the same effect. The usual dose of Amethocaine is one tenth of the dose of cocaine in surface analgesia, or of procaine in infiltration analgesia. It should be noted that adrenaline in the Amethocaine solution reduces the toxicity by one-fifth.

There is one factor in the use of Amethocaine which we have not fully appreciated in our series—that this substance is a p-aminobenzoic acid derivative, which should antagonize the effects of the sulphonomides, since these act by depriving the bacteria of p-aminobenzoic acid. Whether or not this has affected the progress of our operations on septic areas is difficult to appreciate, especially as the majority were on both penicillin and sulphonomide therapy. Luckily penicillin is apparently not dependent on inhibiting p-aminobenzoic acid for its effects.

Apparatus Required. The apparatus required for the block is a sterile tray containing the following articles:—

One 10 c.c. syringe.

One graduated beaker with a minimum capacity of 100 c.c.

One No. 20 hypodermic needle for the skin wheal.

One No. 14 or 16 hypodermic needle about 3 inches long for the block.

Lotion cloths and swabs.

A hundred c.c. of normal sterile saline is placed in the beaker. A 100 mg. ampoule of Amethocaine hydrochloride is opened and the contents emptied into the saline, 0.5 c.c. of 1:1000 adrenaline is added and the contents of the beaker is thoroughly mixed. With the above completed, all is ready for the block to be performed.

THE TECHNIQUE

Our technique has been the 'blind' supraclavicular approach using a number of anatomical land marks. We have tried the infraclavicular approach quite frequently but feel that the former method is easier and more reliable. The paravertebral approach we have found difficult and the axillary approach we are convinced is the most difficult of all. For an understanding of the technique it is necessary to describe briefly the anatomy of the supraclavicular area, as an understanding of this makes the procedure comparatively simple.

The clavicle forms the base of a triangle with the trapezius muscle and the sternomastoid muscle. This triangle becomes more prominent when the shoulders are parallel to the

operating table and the head is turned to the opposite side. This position also brings the supraclavicular structures into a more superficial plane.

The mid point of the clavicle marks the most prominent part of the curve of the first rib. The structures crossing the first rib and attached to it from before, backwards are:

i. The subclavian vein (under cover of the clavicle).
ii. The subclavian artery.
iii. The attachment of scalenus articus muscle.
iv. The brachial plexus.
v. The insertion of scalenus medius muscle.

One finger's-breadth above the mid-point of the clavicle roughly corresponds to that part of the first rib over which the brachial plexus passes. From the above brief anatomical description one can with fair accuracy locate the brachial plexus.

With the patient lying in the supine position with a sandbag under the shoulders (which are parallel to the table) the head is turned to the opposite side. The arms are held closely to the sides and the shoulders depressed as far downwards as possible. This is best accomplished by telling the patient to try to put his hands on his knees.

The patient is now towelled as for a surgical operation. The supraclavicular area is cleaned with alcohol or any reliable antiseptic solution. The mid-point of the clavicle is located and a skin wheal is made with a very fine needle one finger's-breadth above this point. The pulsation of the subclavian artery is now found and the skin wheal should be just lateral to it.

A 3-inch needle of No. 14 or 16 bore is now inserted through the skin wheal, in a backward, inward and downward direction. Just *before* striking the first rib, parasthesia should be elicited. The usual form is either a shooting pain down the arm and hand, or pins and needles of the limb. If parasthesia is not elicited, the needle is pushed down to the first rib. If there is still no effect the needle may be partially withdrawn and re-inserted. It is absolutely essential to obtain parasthesia *before* the injection if the block is to be successful.

We have found in our series that if one tries to picture the anatomy in the region of the first rib, and one makes sure of the anatomical landmarks, it is extremely easy to elicit parasthesia, and this has been accomplished in all of our series. Another interesting fact is that the brachial plexus may be very much more superficial than one anticipates, especially if the patient lies in the position described; not infrequently parasthesia is elicited with the needles not more than 1 or 2 cm. beneath the skin.

We have on occasions had difficulty in obtaining parasthesia in patients who are un-co-operative, who have deformities and also in those encased in plaster of Paris. In these patients repeated insertion of the needle has eventually elicited parasthesia and there have been apparently no sequelae to these manoeuvres.

Not infrequently the needle may penetrate the subclavian artery. We have seen this occur frequently, especially when the operator is new to the technique, but have never seen any untoward effect result from this. On most occasions the slightest haematoma is the only evidence of the vessels having been penetrated. One should, however, emphasize the danger of injecting anaesthetic solution into a vessel. Pablo and Diez-Mallo state that intra-arterial injection is not so serious, intravenous injection being eight to 10 times more toxic as the cardiac effects are manifest more quickly by this route.

It is important also to remember that Sibson's fascia is attached to the inferior surface of the first rib, and may be penetrated if the operator is over-enthusiastic; provided that the aspiration test is applied, little danger results from this.

When parathesia is obtained a 10 c.c. syringe is attached to the needle, containing 1 : 1,000 Amethocaine hydrochloride with adrenaline. The aspiration test is applied to see if the point of the needle is either in a vessel or in the pleural cavity; if it is negative the solution is injected slowly. This should be repeated after every 3 or 4 c.c. are injected as the point of the needle may be displaced during the injection.

If a short duration of anaesthesia is required, 50-60 c.c. of solution should suffice. If, however, a long operative procedure is anticipated, up to 100 c.c. may be injected. Not infrequently the patient may complain of pins and needles during the injection. This is a great help as one can then be certain that the needle is in the correct position. Occasionally twitching of muscles may be noticed during the injection and in well-sedated patients, this may be of great value in producing a satisfactory analgesia.

When the injection is completed the needle is withdrawn and the supraclavicular area gently massaged. This will assist in spreading the solution. At this stage, very frequently the patient will have a complete loss of motor power of the limb. This implies that the block has been successful as the sensory nerves appear to be affected more quickly than do the motor nerves. If, however, the patient has full movement it is advisable to wait a few minutes for the solution to act as premature commencement of the operation may spoil an otherwise perfect anaesthesia. It should be noted, however, that perfect analgesia may be obtained without any motor loss whatsoever. However, a few minutes between completion of the block and commencement of the operation should be a rule.

The use of a bloodless field by means of a Baumanometer cuff around the upper arm has been a feature of most of our cases, and we have found it unnecessary to perform any further block for its application. We should, however, like to emphasize strongly the dangers of the use of Martin's bandages and rubber tourniquets in this area. The only case in this series which presented persistent paralysis as a sequela, had a Martin's bandage employed in this area. However, this case recovered after a time.

Not infrequently when long operative procedures have been anticipated and about 100 c.c. of Amethocaine solution have been used, Horner's syndrome has been observed. This is of a temporary nature and passes off within a short time. It is the result of seepage of fluid to the stellate ganglion which lies close to the neck of the first rib (paralysis of the cervical sympathetic results in miosis, enophthalmos, ptosis, blocked nostril, injection of the conjunctiva, anhydrosis and slight flushing of the face on the affected side).

Sedation. After the block has been completed, it is usually necessary to give some form of sedation, which will keep the patient quiet especially where long procedures are anticipated. It is extremely important that no strong sedative or analgesic should be given just before the block, as with our technique we rely on the patient's co-operation. If the patient is heavily sedated, it is extremely difficult to get the co-operation necessary for a perfect block. Not infrequently the degree of parasthesia is slight and the patient under morphine will not show any reaction. Also occasionally there is a sharp sudden sensation of pins and needles and the patient under the influence of these drugs will react forcibly and become completely un-co-operative.

With our series of cases we have used a combination of Pethidine and Scopolamine (average adult dose 100 mg. and 1/150 grain respectively) intravenously, just after the block. We have found this to be a reliable and effective sedative with the added advantage of the amnesic properties of the Scopolamine. It is important, however to use only the laevo-rotary alkaloids of Scopolamine as the dextro-rotary alkaloids produce a stimulant and excitatory effect and the isometrio-alkaloids are variable in their effects. The combination of Pethidine and Scopolamine given to patients who have consumed large quantities of Kaffir beer or 'skokiaan' has been highly satisfactory and it has been suggested that alcohol acts as a synergist to these drugs.

After the operation has been completed we have found it advisable to put the affected limb in some form of sling, as the temporary paralysis of the motor nerves may persist for an hour or two after operation.

COMPLICATIONS

Complications with this form of anaesthesia are relatively rare, and in our series we have had very few.

1. *Fainting*: This has been described but we have never encountered it.

2. *Pneumothorax*: Undoubtedly this complication occurs, but as the technique of the operator improves, it becomes rare.

It may be caused by either penetrating the lung, or by air passing through the needle into the pleural cavity. Both these possibilities may be avoided if the operator exercises due care, always using fine-bore

needles and always performing the aspiration test. In a few cases in which we suspected pneumothorax, X-ray examination revealed a small degree of collapse which spontaneously recovered within a few days.

3. *Sepsis*: Using Amethocaine hydrochloride and the usual aseptic precautions we have only had one case show any signs following the block.

4. *Pleural Shock*: This has been described but we have not seen it occur.

5. *Toxic Effects*: None of our cases have developed any untoward symptoms with Amethocaine-Adrenaline solution. Although Pablo and Diez-Mallo feel that adrenaline produces tachycardias and arrhythmias, we feel that it reduces the toxicity of our solution and have not had any difficulties with its use.

6. *Paralysis*: Permanent paralysis has been recorded but in our series we have had no cases which had permanent paralysis as a result of the brachial plexus block *per se*. One case showed a persistent paralysis and in this case a Martin's bandage had been applied firmly round the supper arm, for a long period. This case recovered full use of the limb on treatment.

CONTRA-INDICATIONS

There are very few contra-indications to this form of analgesia. The one contra-indication which must be stressed is *sepsis* over the injection site.

We have not performed brachial plexus block in very young children as our method is not suitable for them. Our youngest patient was seven years old and our oldest 92 years.

Comment. In this series of 1,000 cases the technique has been used successfully in all but six cases in which additional general anaesthesia had to be employed. In these cases in which the block was not successful it was performed in every instance by an operator who was new to our methods and who did not elicit parathesia. We have found that with practice and attention to anatomical land marks, the block can be performed with certainty in nearly every instance.

We have used this method of analgesia for a variety of conditions, and Table I indicates the type of condition, the number of cases and also the average time taken for operation.

From Table I it will be seen that tendon suture is by far the commonest procedure in this series. It is also evident that on the average it is a procedure which takes a relatively long period.

Simple fractures are also frequent in the series and when reduced under brachial plexus block enable patients to be ambulatory rather than hospital cases. It is also useful if repeated X-rays have to be taken at the time of reduction, especially if further manipulation is necessary after encasement in plaster of Paris. Another advantage is that there is no explosive risk when X-ray apparatus is being used.

Arterial and nerve sutures are a particularly long and tedious procedure and 5.6% of our series were cases of this nature. The average time for these cases was 180 minutes but cases have taken as long as four to five hours, when all the structures at the wrist have been damaged.

Sepsis in the upper limb, compound fractures and dislocations and amputations are all emergency cases, and if the procedure is performed under brachial plexus block the dangers of full stomachs with general anaesthesia are avoided.

TABLE I

Condition	*No. of Blocks*	*% in Series*	*Average Time of operation (In Minutes)*
Sepsis in hand	116	11.6	25
Sepsis in arm	22	2.2	25
Compound fractures of hand	52	5.2	60
Compound fracture of arm	82	8.2	60
Compound fractures of forearm	20	2.0	60
Lacerated fingers	46	4.6	80
Tendon suture	182	18.2	120
Simple fractures	136	13.6	45
Amputation fingers	78	7.8	45
Amputation hand	2	.2	90
Amputation forearm	7	.7	80
Amputation arm	5	.5	80
Orthopaedic operations	62	6.2	100
Tendon transplants	8	.8	90
Tumours removal	6	.6	90
Ganglionectomy	14	1.4	40
Ulnar bursectomy	6	1.6	45
Skin grafts	16	1.6	45
Removal needles from hand	16	1.6	60
Nerve and/or artery suture	56	5.6	180
Lacerated forearms and /or arms	40	4.0	60
Dislocations	28	2.8	15
Total	1,000	100	

It was found when Baragwanath Hospital opened that difficulties were being experienced with patients who were admitted as surgical emergencies, with the frequent combination of stomachs containing large quantities of liquor, and severe injuries to their upper limbs. The surgeons were reluctant to wait the necessary period for the stomach to empty, so we were compelled to resort to the unpleasant procedure of passing stomach tubes on these cases. We then employed general anaesthesia with false confidence and very frequently our anaesthetics were long tedious affairs, punctuated with the vomiting of copious quantities of Kaffir beer. We soon realized of what little value the passage of a stomach tube really was.

At this stage we determined to perfect a method by which we could give a reliable anaesthetic without the dangers and unpleasantness of general anaesthesia.

SUMMARY

1. The indications for brachial plexus block are described.

2. The history is briefly reviewed.

3. The pharmacology of Amethocaine hydrochloride

is described. The solution used in 1,000 cases of brachial plexus block is given and its effects illustrated.

4. A new technique for brachial plexus block which has been used in 1,000 cases is described.

5. The complications and contra-indications are discussed.

It was due to the efforts of Dr. Elva Chivers that the above technique was developed and I would like to thank her for her help and advice which has made brachial plexus block a by-word in this Department. I would also like to thank Dr. D. C. Devitt for his encouragement and interest in this work and Drs. Friedlander, Sutherland, Rosenberg and Verejes for their assistance in producing this paper.

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WEIGHT-AGE AND HEIGHT-AGE

A COMPARISON OF NORMAL CAPE COLOURED CHILDREN IN THE MUNICIPAL AREA OF CAPE TOWN WITH THE ACCEPTED STANDARDS FOR EUROPEAN CHILDREN

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Up to 1947 no standard of average weights and heights for Coloured children in Cape Town and the Municipal suburban area existed. Therefore, with the permission of Dr. F. O. Fehrsen, Medical Officer of Health, and Dr. E. M. Broome, Maternal and Child Welfare Officer, we decided to make a survey of normal infants and children of the age groups 0-6 years attending Municipal Welfare Centres.

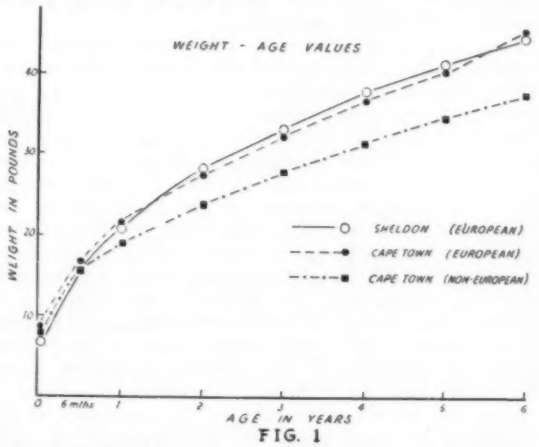

FIG. 1

Native children were not included in the survey.

A basic figure of 1,000 at each year was taken and no differentiation was made for sex, as the variation was found to be negligible.

During the years 1947-1948 heights and weights were recorded within two weeks of the actual birthday. Birth weights were taken from the records of local Maternity Hospitals.

Figs. 1 and 2 were compiled showing the difference between the average weights and heights of children of the two racial groups. The figures for European children are the generally accepted ones overseas and are taken from Sheldon's *Diseases of Infancy and Childhood*.

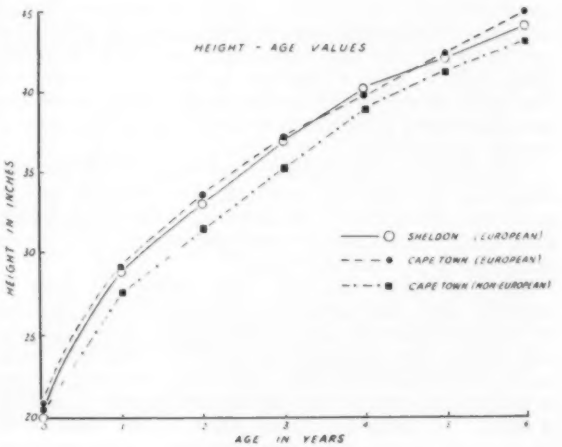

FIG. 2

Average weights and heights of European children attending the Nursery Schools and Welfare Centres in the Municipality of Cape Town are also shown. The investigation of the latter was conducted over a smaller series of children. When 300 observations had been recorded for each age group, these averages were found to approximate so closely to Sheldon's figures that the survey was discontinued.

WEIGHTS

Age (in years)	*European (Sheldon)*	*European (Cape Town)*	*Non-European (Cape Town)*
At birth	7 lb.	7 lb. 11 oz.	7 lb. 5 oz.
1 year	21 lb.	21 lb. 10 oz.	19 lb.
2 years	28 lb.	27 lb. 6 oz.	23 lb. 9 oz.
3 years	33 lb.	32 lb.	27 lb. 14 oz.
4 years	37 lb.	36 lb. 10 oz.	31 lb. 5 oz.
5 years	41 lb.	40 lb. 3 oz.	34 lb. 7 oz.
6 years	45 lb.	45 lb. 10 oz.	37 lb. 8 oz.

HEIGHTS (IN INCHES)

Age (in years)	*European (Sheldon)*	*European (Cape Town)*	*Non-European (Cape Town)*
At birth	20	21.00	20.5
1 year	29	29.35	27.5
2 years	33	33.60	31.4
3 years	37	37.10	35.3
4 years	40	39.74	38.1
5 years	42	42.20	41.0
6 years	44	45.30	43.2

THE ELECTROCARDIOGRAPHIC CHANGES IN THE SYNDROME OF MALIGNANT MALNUTRITION

A PRELIMINARY REPORT

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Although much has been written about the heart in cases of beriberi, it is only recently that the heart in malnutrition has received attention in clinical medicine. Electrocardiographic abnormalities have been reported by Ellis [1] in malnutrition and by Gsell [2] in nutritional oedema. Simonson *et al.*[3] studied the electrocardiographic changes in 32 subjects in semi-starvation and subsequent rehabilitation. They found that during semi-starvation statistically highly significant changes occurred. Decrease in the amplitude of all deflections was observed, but they considered the decrease of the QRS, and T wave amplitude as the most significant. The implications of the results would appear to be that semi-starvation produces a deterioration of the state of the myocardium.

The present report includes the study of 50 patients diagnosed as infantile pellagra, kwashiorkor or the syndrome of malignant malnutrition. The clinical data, laboratory examination and treatment are being published in a separate report.[4]

Serial electrocardiograms were made as soon as possible after the patient's admission to hospital and at frequent intervals during the course of the disease, and during the convalescent period. Standard limb leads and praecordial lead IVF were recorded. Each recording was made with the patient in the recumbent position. In addition, X-ray films of the heart were made on admission and routine cardiovascular examinations were performed.

No clinical cardiovascular disturbances were noted and enlargement of the heart was not observed on radiological examination in the patients showing electrocardiographic changes.

On admission, the most conspicuous change found in the QRS and T waves was a decrease in the amplitude. All 50 cases showed some degree of abnormality of the major deflections, especially the T waves, which were of low amplitude (less than 1.5 mm.) isoelectric or diaphasic.

The bradycardia which is so often noticed in conditions of malnutrition was not observed here. The heart rate varied between 107 and 166 per minute, with no remarkable change when the patients improved clinically. This phenomenon was also observed by Warring [5] in his cases in which the cause of the cardiac changes was considered to be due to a general deficiency of dietary materials.

There appeared to be some relationship between the severity of the condition and the degree of the electrocardiographic abnormalities. In seven cases the electrocardiogram was taken before the intramuscular injection of vitamin B complex and again four hours later. No significant changes were observed. In many cases after the second day of daily vitamin therapy, there was a slight increase in the amplitude of the deflections, but it was not until seven to 14 days later that any marked change occurred. In the majority of cases the normal electrocardiogram was not reached until the twenty-first or thirtieth day (Figs. 1-3). Whether this return to normal was due to specific vitamin therapy, or to the improvement of the general nutritional condition of the patients, cannot be stated and further data are required to establish this point.

Scott and Hermann [6] attributed the smallness of the complexes in their cases to the presence of subcutaneous oedema. It is doubtful whether this was a contributory factor in our cases, as similar changes were observed in the electrocardiogram of malnourished infants without oedema.

Upper respiratory infection was present in many cases, and although electrocardiographic changes are known to occur in this condition, it is thought that this

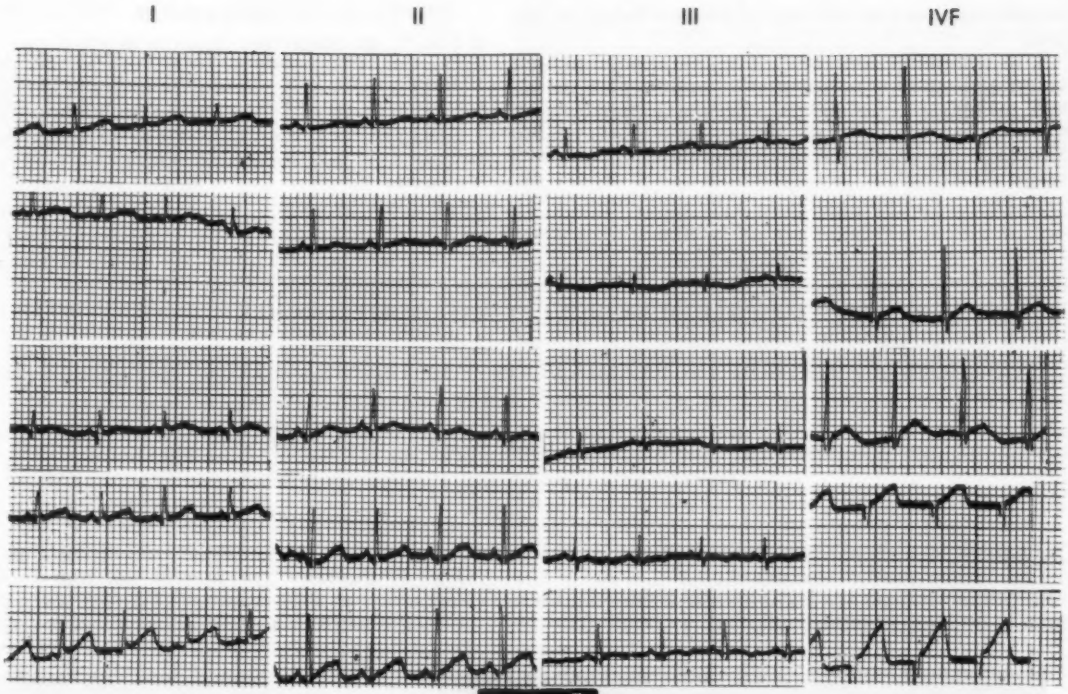

FIG. I

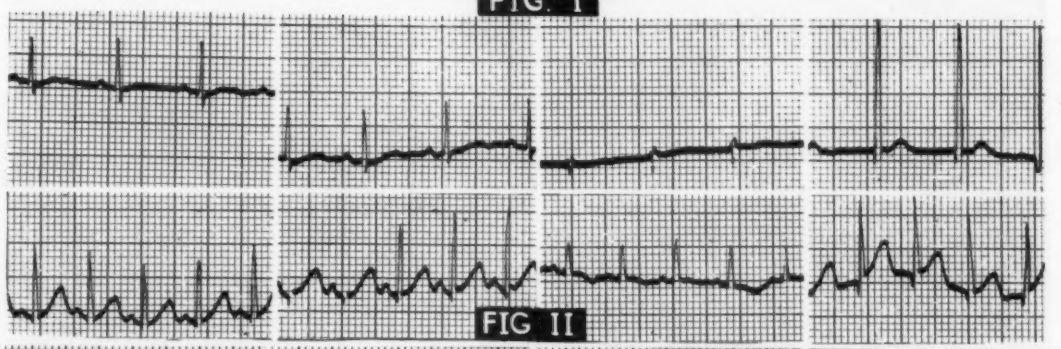

FIG II

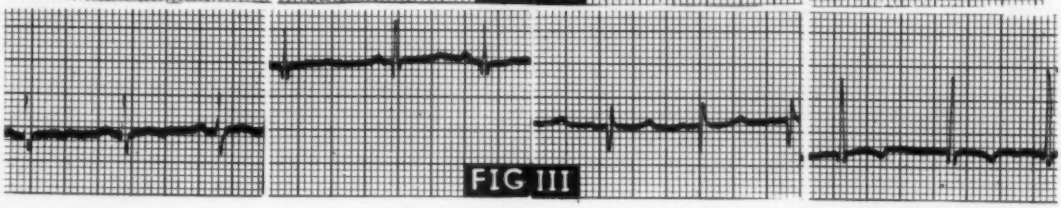

FIG III

Fig. 1. Electrocardiogram of a patient suffering from malignant malnutrition.
A. On admission.
B. Four hours after injection of vitamin B complex.
C. Two days after admission.
D. Nine days after admission. } Daily vitamin therapy continued.
E. Sixteen days after admission.

Fig. 2. Electrocardiogram of a patient suffering from malignant malnutrition.
A. Three days after admission, with no vitamin therapy.
B. Thirteen days after admission. Daily vitamin therapy was commenced on the fifth day after admission.

Fig. 3. Electrocardiogram of a patient suffering from malignant malnutrition. Twelve hours after admission.

possible relation may only be an additive factor, at the most.

It is tentatively concluded that the changes in the electrocardiogram observed in the syndrome of malignant malnutrition indicate myocardial changes. The authors, however, are of the opinion that further research is necessary before more definite conclusions can be postulated.

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RADIOLOGICAL CASE-BOOK. XXIX

A SUGGESTED METHOD OF EXAMINATION FOR DIAPHRAGMATIC HERNIA IN THE UPRIGHT POSITION

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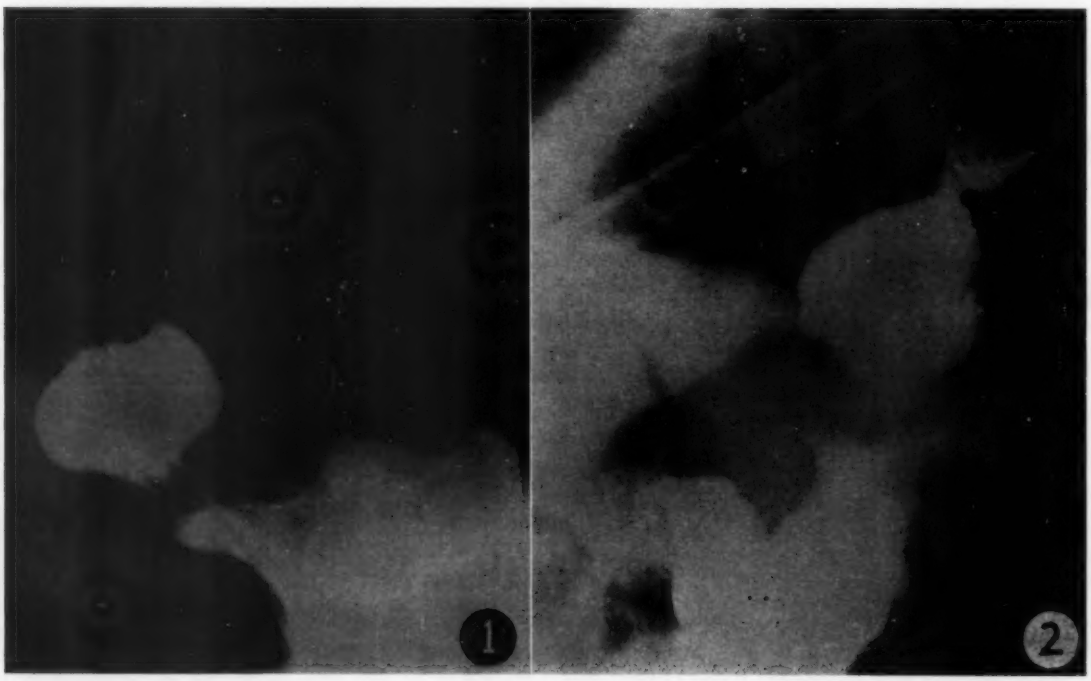
The patient is first given barium by mouth as for a routine barium meal investigation.

He is then rotated (under the screen) into the right anterior oblique position, and told to bend forward 45 degrees. In this position a mouthful of barium is swallowed and the hernia demonstrated.

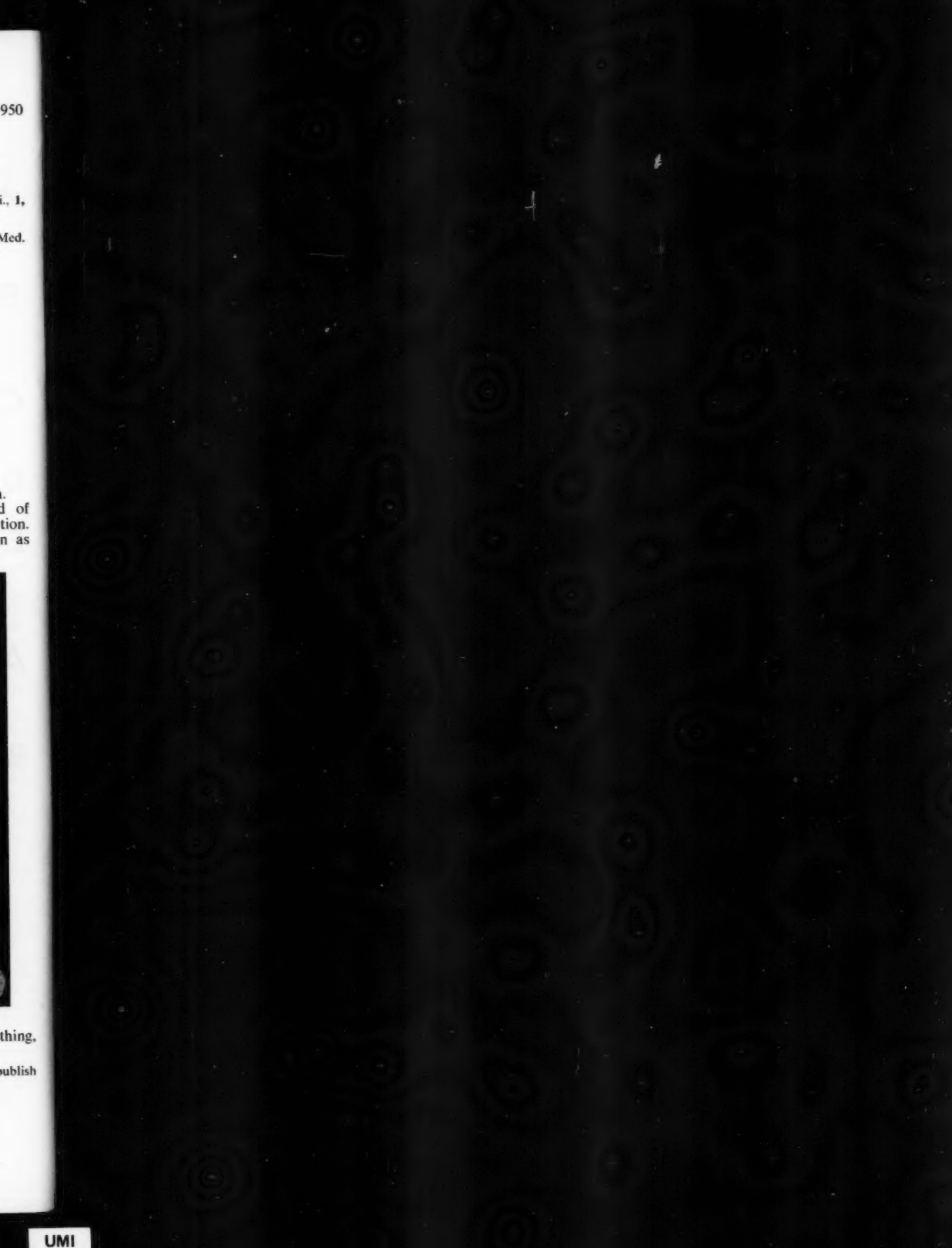
A suggested explanation is that intra-abdominal pressure is raised in the stooping position, thus forcing the barium into the herniated part of the stomach.

Fig. 1 illustrates the present accepted method of investigation in the recumbent Trendelenberg position.

Fig. 2 illustrates a plate in the upright position as suggested, demonstrating a hernia which is, if anything, larger than that shown in Fig. 1.



I wish to thank Prof. S. Oosthuizen for permission to publish these findings.



ASSOCIATION NEWS : VERENIGINGSNUUS

SOUTHERN TRANSVAAL BRANCH: MEETING ARRANGED BY THE DERMATOLOGICAL SUB-GROUP

SYMPOSIUM ON THE ECZEMAS

I. INTRODUCTION (DR. S. GORDON)

The term eczema originated 1,500 years ago when it was thought to describe a morbid process in which a person eliminated poisons through the skin, either gently in the form of fine itchy papules, or exuberantly in large weeping sheets. Until recent times eczema was offered as a diagnosis. One suffered from eczema in the same way as one had a dropsy, or went into a decline, or died in a convulsion. But, whereas even the *Reader's Digest* would now hesitate to speak of a dropsy or a decline in that sense, the habit of referring to eczema as a specific disease persists even in medical literature.

With the appearance of dermatologists about 150 years ago, it was realized that the word eczema was almost synonymous with dermatology, that it was being applied to almost any ill with which the human skin could be afflicted. The first attempts to limit the term were in the direction of division into morphological groups distinguished by the prominence of one or other feature of the eczema reaction. Thus we had fissured eczema, squamous eczema, pustular eczema, marginated eczema, red eczema, pink eczema, dry eczema, weeping eczema, moaning eczema and so on. All these were mere names. They gave the dermatologist a lot of copy for his publications; they gave him a false air of erudition; they also gave him a headache. The patient still had his lotion, or his ointment, and an unlimited license to scratch.

The separation from the eczema medley of fungous infections, chronic impetigo, and dermatitis herpetiformis were advances of a more significant nature. They were stages in the process which reduced eczema to proportions in which it could acquire a meaning. The attempt to separate the eczemas into eczema and dermatitis was less fortunate. In the first place what was an eczema in Germany was a dermatitis in England, and what was an eczema in England was a dermatitis in Scotland. Secondly, in many cases, it was found impossible to separate the constitutional from the allergic, as, for instance, when a dermatitis caused by a known external allergen changed its nature and perpetuated itself as an eczematous process when the original cause was no longer operative.

It used to be taught that the clinical pattern of an endogenous eczema is that of a grouped papular eruption, and that of an exogenous dermatitis is a diffuse oedematous and erythematous eruption. It is now known that the same substance can produce the same eruption whether ingested, injected, or applied topically. One might add at this stage that compromise terms like eczematous dermatitis and infectious eczematoid dermatitis are obscure and redundant and could be discarded without loss to dermatology.

In modern textbooks of dermatology, the chapter on eczema usually starts with an attempt at an etiological classification, but there is always a lack of clarity and an obvious reluctance to break away completely from old editions.

For the purpose of this symposium I wish to adopt a concept of eczema, which will probably be regarded as a little unorthodox, with the contention that a point of view—however controversial—is a better subject for discussion than a synopsis of a chapter in a textbook. This concept is that eczema is a clinical expression of a pathological process which takes place in the skin when it reacts to a noxa. The pathological process is a dilatation of the capillaries in the corium, and a perivascular infiltration of lymphocytes, together with an intracellular and extracellular oedema of the epidermis. Depending on the prominence of one or other element of this eczema reaction, the eruption is erythematous, oedematous, dry, scaling, weeping or crusted. This concept applies to an eczema reaction whether it is on the hands or the face, in the infant or the aged, the fat or the lean, the gouty or the diabetic. It broadens eczema and narrows it at the same time. It broadens it because a noxa can be anything under the sun and including the sun. A sunburn in a person who is abnormally sensitive to sunlight is as much an eczema as a cheiropompholyx secondary to a fungous infection of the toes. It narrows it because, if it is taken to its logical conclusion, it excludes any eruption which cannot be shown to be due to a specific and known allergen.

This purely etiological approach has a practical application. It takes away from eczema the stigma of incurability. From being a dreadful disease, only one stage removed from leprosy, eczema becomes a condition which one should be able to cure provided one could find the offending allergen. This is not always easy, but at least one cannot now be smugly content with a diagnosis of eczema and the prescription of a palliative. One has to search, and search exhaustively, for a possible allergen the elimination of which might result in a complete cure.

This concept of eczema finds its simplest expression in the type of eczema commonly known as contact dermatitis. Here a known allergen produces a specific reaction on contact with skin, after one or more innocuous exposures. The relationship between reaction and noxa is direct and definite, and the elimination of the noxa generally results in the resolution of the eczema.

There are some gaps in our knowledge here. We do not know why a reaction to an irritant does not always subside when the irritant is removed. We do not understand the relationship between the allergic state and the endocrine balance. We do not understand why with some irritants the reaction becomes progressively intensified with further exposure, while with others a spontaneous lowering of sensitivity takes place in time.

When we come to the endogenous form of eczema we are on less certain ground. We know that certain substances, e.g. arsenic and quinine may produce eczematous reactions when taken by mouth or injected, and the use of sulphonamide drugs has taught us that the same reaction can be produced either by topical application or internal administration. The work of Flood and Perry, and of Rowe has convinced us that eczema reactions can be produced specifically by food allergens. We also have some evidence that when a fungal or bacterial infection produces sensitization of the skin at a distance, that sensitization is mediated via the blood stream. By analogy we assume that other substances, as yet unknown, can be liberated in the body and give rise to eczema reactions on the surface. Unfortunately here we are forced to speak of metabolites and toxins and are back in the realms of speculation. To this group also belongs the condition known as atopic eczema. It is believed that this condition is due to an inherent, polyvalent sensitivity which fluctuates from day to day and is greatly influenced by psychological factors.

I spoke about gaps in our knowledge in connexion with contact eczema. Here, I think, we have more gaps than knowledge. But at least our ignorance is now a conscious ignorance. There is no attempt to hide behind a cloud of pretentious and meaningless words.

Dr. Loewenthal and I published an article last year in which we argued that some of these eczemas, in which an exhaustive search fails to find an allergen, are really cases of dermatitis herpetiformis and can be treated successfully with arsenic or Sulphapyridine. I am sure that many of our colleagues will disagree with us. Perhaps we had become a little over-enthusiastic about our therapeutic success and had somehow misinterpreted our observations. If so, that misinterpretation has not yet been shown up. The fact remains, however, that the more critical one's attitude, the more disinclined one is to accept internal toxic eczema, or constitutional eczema, or atopic eczema as a complete and definite entity.

Another group of eczemas with a fairly well-defined etiological basis is the infective eczemas. As an example we may take the variety known as flexural infective dermatitis. In this, starting from a streptococcal fissure or an infective discharge, the eczema reaction spreads peripherally to form a crusted or weeping erythematous plaque. The etiological basis of this type of eczema is generally accepted to-day. Unfortunately it has not yet been found possible to reproduce it. It may be argued that this is not truly an eczema, but a form of impetigo, and this is an argument which cannot be dismissed lightly, unless we postulate that, besides the actual infection with micro-organisms, there is also an allergic sensitivity to these organisms.

It is also often argued that infective dermatitis is only another name for seborrhoeic eczema. The implication is that

those of us who are opposed to the use of this term are merely being pedantic about the use of words. This does not remotely resemble the facts. We have discarded the term seborrhoeic dermatitis because we regard it as a pale, formless ghost that stalks through the pages of medical literature. It is the most ill-conceived and the most abused term in dermatology. It does not affect the seborrhoeic areas only, like an acne does; it is more often diagnosed in old age, when the sebaceous glands are partly atrophied, than at puberty, when the function of these glands is at its height; and it is applied unblushingly to infants in whom a seborrhoeic state is almost an impossibility. We maintain that such an entity does not exist, or ever did exist, that it is a facile distributional diagnosis—or misdiagnosis—for a variety of skin diseases that ranges from lymphoblastoma to undiscovered contact allergy and includes flexural psoriasis, infective eczema, and nutritional deficiency states. It is almost certain that before nail polish dermatitis was described, the now familiar scaly patches on the eyelids, face, and neck were called seborrhoeic dermatitis, and that before riboflavin deficiency was recognized, the scaly patches of the naso-labial fold were treated with sulphur ointment. It is equally certain that some of the cases that are to-day labelled seborrhoeic dermatitis will, 10 years hence, be obvious cases of mycosis fungoides. I am not suggesting that this is due to faulty observation. If it was possible for Hebra to describe lupus erythematosus as seborrhoea congestiva, then even Hebra did not know what he meant by seborrhoea.

I have now pretty well covered the ground and I merely wish to add that, with this etiological concept, the classification of infantile eczema as a distinct type also becomes somewhat irrational. Presumably an infant, like an adult, can become sensitive to a noxa, which may be a food protein, but very seldom is, and may also be an external contactant, or a bacterial allergen. Infants can suffer from streptococcides, from prickly heat, from various forms of impetigo; they have been known to have psoriasis in the first few months of life and there have been numerous reports of dermatitis herpetiformis in infancy. The diagnosis of these conditions in infancy can be very difficult. It is much easier to diagnose that the patient is an infant and call his rash infantile eczema, but a lot less accurate. I honestly think that if we stopped using the term infantile eczema altogether we would acquire a healthier approach to dermatological problems in infancy.

II. DIAGNOSIS OF ECZEMA (DR. A. ROBINS)

Considerable progress has been made in the last few decades in our knowledge of the Eczema group of dermatoses. There is, however, divergence of opinion regarding the meaning to be attached to the term 'eczema', and the classification and terminology of this group of skin affections. It is therefore hardly possible to discuss the diagnosis of eczema without first giving a brief outline of one's conception of the manifestations involved. In fact, in so doing the important diagnostic features could perhaps be indicated at the same time.

Eczema could be defined very briefly as a form of reaction of the skin to an irritant or to an agent to which it is sensitive. As it can be caused by an immense variety of agents, physical, chemical, products of micro-organisms, etc., its further definition must rest on its morphological features rather than its etiology.

Clinically the condition manifests itself as a diffuse itchy eruption which may present a multiform and somewhat variable appearance according to the intensity and stage of the reaction. In the more acute cases it may commence with redness, oedema, formation of papules or vesicles, to be followed by weeping and crusting, and later by thickening and scaling of the affected skin. Histologically the elementary and characteristic lesion is intra-epidermal oedema known as spongiosis which, when sufficiently pronounced, gives rise to macroscopic vesicles or blisters.

The reaction takes place predominantly in the epidermal layer of the skin which appears to be the principal site of the sensitive shock-tissue. The most suitable method therefore of diagnostic skin testing in this type of dermatitis is one that brings the suspected substance into intimate contact with the epidermis, i.e. the patch test which when positive reproduces in miniature the original skin disease.

The clinical picture of an eczematous dermatitis as described above can be produced through contact with an irritant or it can be the result of specific sensitization by repeated exposure to one of the numberless and infinitely varied substances known as allergens. In the great majority of cases these agents act from without through direct exposure of the skin surface, and the condition is then known as contact dermatitis. The same type of eruption, and I would like to emphasize the point, can in certain cases be produced by the causative agent reaching the sensitized skin through the circulation. Thus various drugs can cause an eczematous dermatitis in this way. A patient who had developed through external contact an epidermal hypersensitivity to mercury or to a sulpha-drug will be liable to react with an eczematous eruption if given at a later date the same drug by the mouth or by injection.

A similar example is afforded by the eczematous dermatophytid in which the sensitizing agent conveyed through the circulation emanates from a focus of fungal infection. A patch test, with fungal extract (trichophytin) in these cases produces a reaction in the form of an eczematous papulo-vesicular eruption.

A similar pathogenetic mechanism is probably operative in cases of food allergy which manifest themselves in the form of an eruption with the characteristic morphological features of an eczematous dermatitis. It is interesting to note here the well-established fact that a dermatitis originally due to contact sensitization may persist after the causal contact allergen has been eliminated because cutaneous food allergy later manifests itself at the site of the original dermatitis. It would appear that the phenomenon of polyvalent sensitization following the originally monovalent or specific sensitivity applies not only to allergens acting on the skin from without but also from within. These cases provide a good illustration that the eczematous dermatitis retains its essential features whether it had been caused by an allergen acting externally or internally.

It is noteworthy that no specific antibodies can as a rule be demonstrated, nor can an hereditary or familial factor be found in most of these cases.

It is my view, and that of other dermatologists, that the use of the term 'eczema', no matter how qualified, should be limited to the well-defined entity outlined above.

It is important to differentiate between eczematous dermatitis and a condition which used to be known as 'constitutional eczema', 'hay-fever eczema' or 'Besnier's prurigo'. It was recognized when these names were introduced that there were important clinical etiological differences between the disease they describe and the other forms of eczema. The condition is now usually called 'atopic dermatitis' or 'neurodermatitis'. Whether one regards the individual case as due to Coca's atopy or to psycho-somatic factors, the important fact is that the disease is clinically, etiologically and pathogenetically different from eczematous dermatitis. It also requires different methods of treatment. The usually dry, infiltrated and lichenified, highly pruritic patchy lesions with a predilection for the flexures, the age of onset, the personal and family history should help in the correct diagnosis.

Apart from non-living agents, micro-organisms and their products can act as skin sensitizing factors and produce an eczematous response. Perhaps the best example is found in the superficial forms of fungal infection, at one time known as 'eczematoid ringworm'. The resemblance in these cases to eczematous dermatitis can be very close. In the average case, however, the sharp outline of the lesions, the evidence of healing in the centre, the advancing active borders together with the localization will usually be characteristic. In doubtful cases laboratory examination may be resorted to.

A most difficult diagnostic problem can be presented by the eczematous form of a fungal 'id', usually affecting the hands. It can be clinically indistinguishable from an eczematous dermatitis caused by a contactant, ingestant, inhalant or an allergen derived from a focus of bacterial infection. One has first to ascertain that there is an active focus of fungal infection on the feet or elsewhere, also exclude other probable etiological factors before diagnosing the condition as a fungal 'id'.

An example of the eczematogenous agent emanating from bacterial organisms is afforded by infective dermatitis, also known as infectious eczematoid dermatitis. It can be caused by exposure of the skin to a purulent discharge from infective

lesions, such as otitis media or an osteomyelitic sinus. In other cases it is the result of trauma, often superficial and overlooked by the patient. Secondary infection of a minor cut or abrasion can apparently be followed by epidermal sensitization to the infecting organism or its products, which then manifests itself as an eczematoid dermatitis. This sequence of events is usually seen on the hands of manual workers. The pustular and impetiginized lesions, the peripheral spread, the auto-inoculation of new areas, the presence of outlying lesions of folliculitis are typical features in these cases.

Seborrhoeic dermatitis, whatever the etiological factors may be, and whatever its appropriate name should be, usually presents a characteristic picture of an erythematous, non-vesicular dermatitis, the lesions having the form of ringed, configurate or irregular placques with loosely adherent yellowish greasy scales, affecting mainly the scalp, eyebrows, the sternum and the interscapular region.

Apart from the dermatological diagnosis of an eczematous dermatitis as such, the etiological diagnosis, i.e. the identification of the offending agent in the individual case, is obviously of vital importance. In some cases its nature is self-evident, or becomes apparent from the history, appearance, course and localization of the eruption, as when it emanates from some article of clothing, footwear, hair dye, etc. In others it may elude the most painstaking investigation. It must always be borne in mind that ordinary and seemingly innocuous substances can act as contact allergens. The following case may serve as an illustration.

The patient had been suffering from a recurring eczematous eruption on the hands for over two years, mainly during the winter time. Treatment with various local applications and X-ray therapy failed to bring lasting relief. Being a general dealer the patient came into contact with various potential allergens. The elimination of suspected contacts at work and at home, and being away from his usual surroundings while on holiday, did not produce any improvement. Further observation and questioning drew attention to the fact that the patient was very fond of oranges and that he used to peel and consume a number of oranges daily. A patch test with oil of orange was positive. The dermatitis cleared when contact with orange peel was prevented. The patient was advised not to prepare orange juice himself.

The most useful diagnostic method will be found in a detailed and well-directed history comprising the mode of onset and the site of first appearance of the eruption, the circumstances associated with any exacerbations or recurrences, the patient's environment at home, his occupation and hobbies and last, but not least, previous medication. The latter particularly applies to various types of antiseptics—mercurials, phenols, sulphur, members of the flavine group and sulphonamides. The latest additions to this list are the antibiotics. Cases of contact sensitization to penicillin and streptomycin are by no means uncommon.

Patch testing is often superfluous or is only required to confirm the diagnosis made from the history and clinical findings. However, clinical experience and a good knowledge of the great multitude of potential eczematogenous allergens that are encountered in various forms and disguises in everyday life as well as in various occupations and industries, is usually required to select the allergens that are most likely to have caused the eruption in a given case. Patience on the part of the investigator and intelligent co-operation of the patient are also important factors in dealing with the more obscure cases. In trained hands and with adequate facilities for investigation the causal allergen can be found in an appreciable proportion of cases, and the patient freed from his disability and suffering.

This has been, I am afraid, a very sketchy account of a subject to which I had no hope of doing justice in the short time at my disposal. I can only trust that, if not of much practical value, it may at least have served to stimulate interest in this important group of skin diseases.

III. EXOGENOUS ECZEMA (DR. J. FROOTKO)

Exogenous eczema constitutes a morphologic group of cutaneous reactions, caused by the direct action of a noxa from outside of the body. Clinically this reaction is characterized by redness, oedema, papules, vesiculation, oozing and weeping in the acute stages, and by thickening, lichenification, pigmentation and itching in the later stages. Similar reactions can be produced from within the body by haemotogenously distributed noxae. This aspect of eczema will be dealt with under Endogenous Eczema.

The majority of eczematous reactions are produced by the direct action of noxae from without and the aetiology of these reactions is now known and may be demonstrated by patch tests. Generally speaking the causes of exogenous eczema are to be found in the influences and substances of the human environment. The actual causal factors can be divided into four main groups.

a. *Physical and Mechanical*: Light, heat, scratching and rubbing, and other traumata. An example of a combination of these factors producing an eczema is excessive heat, which gives rise to perspiration. This softens the horny layers of the skin, which when rubbed or scratched become macerated and an inflammatory process results. The road is opened to further direct influences such as infection with bacteria and fungi, either direct or as secondary invaders, resulting, e.g. in an intertriginous eczematous eruption in the groins or of the breast folds, or behind the ears.

b. *Plant Poisons*: Many plants, flowers, weeds and woods contain substances which irritate the skin of so many people that they can almost be considered primary irritants. Imbuia wood dust is a common substance that produces eczematous changes in workers in the furniture and allied industries, and khaki weed is a not uncommon eczematizer in this country. This plant probably acts as a photosensitizing agent and actinic rays possibly provide the trigger factor that produces the eczematous reaction.

c. The third group contains the *biological agents*, such as bacteria, fungi and animal parasites. Monilia infection of the interdigital webs in housewives is frequently encountered in practice and eczematous reactions complicating a scabies infection are frequently seen.

d. *Chemical Agents*: They are the predominating causes of exogenous eczema. It is reasonable to say that any chemical substance can be potentially hazardous to the skin.

These substances whether organic or inorganic act on the skin either as primary irritants or as skin sensitizers.

Schwartz defines a *primary skin irritant* as an agent which will cause an inflammatory process by direct action on the *normal* skin at the site of contact, if it is permitted to act in sufficient intensity or quantity for a sufficient length of time. Primary irritants can act on the skin rapidly or slowly depending on their concentration and length of contact. The more concentrated the irritant and the longer the contact, the more rapid and intense is the resulting inflammatory process.

Examples of the more common primary irritants are the inorganic and organic acids such as sulphuric, chromic, formic, and oxalic acids, the inorganic and the organic alkalis such as sodium, potassium, ammonium hydroxides, ethanolamines and methylamines; the organic solvents such as benzene and turpentine; the coal tar solvents; the essential oils; plant poisons and numerous other substances.

Primary irritants cause eczematous reactions directly on the skin in the following ways:—

i. Either by chemically reacting with it.

ii. By dissolving or precipitating some of its essential components from it. For instance alkalis such as soaps act as solvents of the horny cells, petroleum distillates such as petrol act as fat solvents, and the heavy metal salts in combining with the skin precipitate the skin proteins and form albuminates.

iii. By disturbing the membrane equilibrium or osmotic pressure of the skin cells.

There are however many other substances that do not act as primary irritants but as allergenic agents. On coming into contact with the skin they can produce a specific hypersensitivity in the skin cells which give rise to a delayed eczematous reaction. These substances are known as cutaneous sensitizers and are mainly responsible for allergic contact-type eczema—contact type, because the manner in which eczema is produced is by contact of the sensitized skin cells with the allergen coming from without the body. Contact-type eczema is in fact an allergic reaction produced by external contact with the allergen (which is the causal agent) and is an inflammatory process of the skin presenting the clinical and histopathological picture characteristic of eczema. There are

exceptions to this rule. An eczematous reaction of this type can occur following for example the application of a sulpha drug for treatment purposes. The same reaction can be brought about by taking sulpha drug by mouth, but the usual manner of eliciting this response is through the external contact.

These substances are found in dyes and dye intermediaries, soaps, insecticides, cosmetics, oils, resins, coal tar derivatives, antibiotics and other therapeutic agents used for topical therapy and many other substances. In order to understand the mechanism of this type of inflammatory reaction it is necessary to define 'allergic reaction' and 'cutaneous sensitizer'.

Merril Chase states that an allergic reaction is a most specific form of immunologic reaction. It is based on an acquired alteration in the capacity to react, which is highly specific, i.e. which is produced by previous exposure and manifested or elicited on subsequent exposure to the same agent or to an immunologic relative of that agent.

A cutaneous sensitizer is an agent which does not necessarily cause demonstrable cutaneous changes on first contact, but may effect such specific changes in the skin that after five to seven days or more, further contact on the same or other parts of the body will cause an inflammatory reaction. A primary irritant may also be a sensitizer. Exposure to it may so condition the skin that further contact with even minimal dilutions and exposure periods that would not previously have caused any trouble may now result in an inflammatory skin process.

Allergic contact-type eczema is a result of a particular type of allergic reaction. In these reactions the tissue does not give an immediate response when it comes into contact with the allergen. The clinical reaction manifests itself after a latent period of some time.

Exogenous eczema is a morphological group of cutaneous reactions caused by the direct action of noxae from outside of the body. Identification of the causive agents requires careful history taking, knowledge of the patient's occupation, environment and hobbies, correct interpretation of the nature of the presenting eruption as well as its localization, and an adequate knowledge of the agents and substances that can act as primary irritants and cutaneous sensitizers.

IV. ENDOGENOUS ECZEMA (DR. M. CHITTERS)

The term "endogenous" is used in this paper to include all allergens or noxae spread by the blood stream whether they enter the organism by ingestion, inhalation or injection. Also included are the rather complex factors of emotional influences, endocrine and metabolic disorders, nutritional and blood diseases.

When compared with cases of contact-type dermatitis, this group is a very small one. It is, however, this type of case which offers the greatest difficulty in diagnosis and treatment.

These cases are diagnosed by a process of elimination after an exhaustive and painstaking history and clinical examination, and aided by the investigations of blood counts, urine analysis, skin biopsy, elimination diets and other tests. It will be readily appreciated, therefore, that the investigation of such a case is as time-consuming and difficult as any other medical condition. A fair comparison would be the investigation required in a case of asthma or ulcerative colitis.

Generally speaking, the eczematous lesions are discreet, round or oval, of various sizes, and in different stages of evolution. Common sites are the face, neck, cubital and popliteal fossae, hands, feet and trunk, in varying picture patterns. The discrete nummular character of the lesions, with normal skin between them, is an important diagnostic feature. The tendency to chronicity, occasional seasonal variations, clinical examination and laboratory investigations must all play a part in the final evaluation of the case.

An attempt will be made to discuss cases in this group as they have presented in clinical practice.

a. *Food Allergies* are responsible for a significant number of eczematous eruptions. Skin testing is notoriously unreliable, and the diagnosis is confirmed by elimination diets. The duration of these cases averages one or more years and their cure is one of the most dramatic seen in dermatology. Eggs, pork, tomatoes, wheat, milk and peas are the commonest offenders, in decreasing order of frequency. Some cases are complicated by secondary infection, external irritants and scratch effects. These must be dealt with prior to diet testing. Some cases of contact dermatitis are complicated by a food allergen. A hairdresser, sensitive to dyes and shampoos, failed to improve until wheat was excluded from his diet. Another patient with a peri-axillary textile dermatitis was in addition allergic to tomatoes and chocolate.

A remarkable feature is the tendency of this condition to affect the fingers and hands in a large proportion of cases. There is no adequate explanation for this strange distribution.

Food allergies occur frequently enough to warrant the trial of elimination diets in every case of undiagnosed eczema.

b. *Inhalants* do not commonly cause eczema. Cases have been described due to the inhalation of house-dust, pollens, animal emanations, wool, silk and feathers. Skin testing is of some value, but desensitization is a long process and not always successful. Two interesting cases have been observed.

A male, aged 35, had eczematous lesions on the forehead, eyelids, face and neck for approximately two years. Although never entirely disappearing, the eruption improved in the winter but became much worse in the spring and summer. He is also a sufferer of asthma and hayfever. Injections against various pollens, grasses and house-dust failed to cause any improvement. On two occasions, however, while on holiday in Cape Town, all symptoms disappeared entirely but recurred immediately the patient returned to the Transvaal.

An old lady of 75 had eczematous lesions on the face, neck, hands, forearms and arms. She too, cleared completely in Cape Town, but relapsed in Johannesburg.

It is not suggested that these sufferers should be transferred to the Cape. They are, nevertheless, extremely difficult to treat and a complete change of environment may sometimes be the best mode of treatment.

c. *Emotional Factors.* Had this paper been written two or three years ago this group might not even have been included. Experience has now convinced one of the importance of psychogenic factors in all cases of long-standing skin disorders no matter what their etiology may be. It is a difficult matter to decide which is cause and which effect. There are, however, cases in which a psychogenic factor appears to be the chief or sole cause. Many cases of Pruritus Ani and Vulvae fall into this category. The treatment is more likely to be successful in the hands of a psychiatrist but it is not easy to convince patients of the need for psychological care. There still appears to be some stigma attached to treatment by a psychiatrist.

The dermatologist, unfortunately, knows too little about psychology, and the psychologist too little about dermatology.

d. *Nutritional Eczema.* Patients on inadequate diets, chronic alcoholics, those suffering from disorders interfering with the absorption or metabolism of essential foodstuffs or vitamins, and also many other chronic conditions are not uncommonly associated with eczematous eruptions which fail to clear until the cause has been treated. Estimation of the haemoglobin, blood-protein, and the albumin-globulin ratio are often useful diagnostic aids. Obviously local applications alone will not result in cure.

e. Examples of eczema due to *drugs*, by ingestion or injection, are too well known to warrant much further discussion. Although eczema may not be the commonest reaction pattern to drugs it occurs often enough with the heavy metals, arsenicals and sulphonamides. The prognosis with regard to the heavy metals has been dramatically improved by the introduction of B.A.L.

f. The importance of *septic foci* in tonsils, sinuses, cervix, prostate and other organs, has probably been exaggerated, but one does meet the occasional case of eczema which does not respond to treatment until the sepsis has been eradicated.

Intestinal putrefaction and constipation are chiefly theoretical and extremely doubtful causes.

g. *Diabetes, cirrhosis of the liver, renal* and *pancreatic disorders* may be associated with eczema. The skin condition may persist until the more important affection has been controlled or alleviated.

The intertiginous eczema, i.e. occurring under the breast, in the crurogenital folds or around other body orifices, are common complications in diabetics. Yeast, fungi and organisms often occur as secondary invaders.

h. While *disorders of the blood or reticulo-endothelial*

system are not common causes of eczema, it is well to remember that Hodgkin's disease, mycosis fungoides, leukaemia and macrocytic anaemias may present with the skin condition as the earliest sign or symptom.

One case of dermato-myositis was recently observed which presented with an erythematous and eczematous eruption. The fatal termination occurred within a matter of months.

i. A group of cases still remain for which no adequate explanation may be found. Loewenthal and Gordon separated some of these and classified them as atypical cases of dermatitis herpetiformis. Although the etiology is unknown, many respond to Sulphapyridine or arsenicals. The tendency is, however, towards relapse or chronicity.

Perhaps the newer advances with Adrenocortico-trophic hormone Compound E. and further biochemical research will result in a better understanding of these conditions.

Treatment will meanwhile remain symptomatic and unsatisfactory until the etiological factors have been elucidated.

V. DISCUSSION

Dr. L. J. A. Loewenthal: The first point which arises from listening to these four excellent papers, is that four dermatologists show close agreement with regard to the problem of eczema. I may sum up what they have all said in different ways by stating that *eczema is a physical sign*, just as oedema is a physical sign, and not a disease. Once this has been realized, it is easy to appreciate that this sign can be produced by agents acting from without or by agents reaching the skin in the blood stream.

The position of 'atopic dermatitis' or 'neurodermatitis' is not as plain as I should like. Certainly it is more often endogenous than exogenous, but the differentiation of lesions clinically may be impossible. I defy anyone, for instance, to distinguish clinically or histologically, between the eruption produced on the eyelids and neck from allergy to nail lacquer, and that which is seen in many cases of atopic dermatitis in the same situations.

In contact dermatitis one often gets some help from the distribution of the lesions and Waldbott has even gone so far as to map out the areas on the hands which may be affected in this way in various trades. Personally, I think this is going a bit too far and I am on principle inclined to distrust topographical diagnoses. One of the most fruitful causes of bad diagnosis in dermatology is the habit of labelling all eruptions of the scalp, face, neck and shoulders 'seborrhoeic dermatitis', and inflammatory eruptions around the toes as 'athlete's foot'; careful investigation shows that less than half of such cases suffer from fungus infection, while many actually have a bacterial infection and others contact dermatitis from footwear. Similarly, any lesion in the crutch is called 'dhobie itch' even though many of these again are bacterial infections or psoriasis of the flexural type.

Reverting to seborrhoeic dermatitis, I should like to point out that its persistence as an alleged entity is due to a series of misapprehensions. Unna, who coined the term, believed that all eczemas were an infection with a mythical organism which he named the morococcus; this is now known to have been false and the morococcus to have been Stapyhlococcus albus. In seborrhoeic dermatitis, Unna attempted to show that the skin contained excessive amounts of fat and that these were produced by the *sweat glands*. He distinctly mentioned that the sebaceous glands were apparently normal. It is now known that his findings regarding excessive fat were also wrong, and there seems to be no excuse for perpetuating the effects of a non-existent organism on a mythically altered skin.

When we come to treatment, there is one fact which I think should be more widely known. Sulphapyridine and arsenic appear to have a palliative effect on many eczemas of different causation. As you know, Dr. Gordon and I originally found that it acted particularly well in cases of endogenous eczema which had many resemblances to dermatitis herpetiformis. It is now my opinion that these drugs exert an effect on the epidermis comparable to that of the anti-histaminics on the blood vessels in urticaria.

I want to emphasize once more that calcium, ephedrine and the anti-histaminics given internally are completely useless in the treatment of eczematous eruptions.

DISTRICT SURGEON'S COURSE : PRETORIA, 1950

Some 15 district surgeons assembled on 3 July at the official opening of the Course at the Pretoria University. We were welcomed by the Rector of the University, Prof. E. H. Rautenbach and the Dean of the Faculty of Medicine, Prof. L. J. te Groen. Doctor D. H. S. Annecke (of malaria fame), who is Acting Secretary for Health, represented the Department. The Honourable the Minister of Health, Dr. A. J. Stals, gave a very interesting and inspiring opening address.

This is the first course to be held at Pretoria and it was unique in that all the lectures were given in Afrikaans.

Dr. B. M. Clark of the Health Department was responsible for arranging the course in conjunction with the University authorities. This was no mean undertaking and everything went without a hitch. One small criticism—Dr. Clark left us no spare time!

The standard of teaching and the facilities at Pretoria are unsurpassed. Professor Loubser's medico-legal classes were excellent and most refreshing. The clinical lectures were most instructive and of practical interest.

Under the heading of Departmental Administrative Difficulties we learned a lot. With Dr. Annecke were Dr. Schiller and Dr. Conradie of the Health Department—the latter two scrutinize the official forms we fill in! We were able to air our troubles to these officers. On the other hand we got an insight into their difficulties at Head Office.

On the social side we were entertained at Polley's Hotel to a 'Skermerkelkie'—delightful word!—it means sundowner party. We had a dinner at the same place given by the University. The class reciprocated with another party at Polley's.

It is regretted that so few people took advantage of the opportunity offered by this course. My own opinion is that it should be compulsory for District Surgeons to attend a course, say once in two years.

A hearty vote of thanks is due, firstly to the officials of the Health Department; secondly to the University authorities and lastly to Mrs. Mostert, the wife of Professor Mostert, who looked after us so well at College House. A good time was had by all and a very profitable time too.

J. C. Downes, M.B., Ch.B.

24 July 1950.

IN MEMORIAM

DR. W. R. FYVIE

I first met Dr. William Raymond Fyvie in Italy during the war, and was subsequently closely associated with him in Johannesburg in 1946 and part of 1947. We were sharing 'digs' at the time.

This young man, coming as he did of Scottish stock, was loved by all for his keen sense of humour, his strong principles and his essentially human nature.

As a doctor his professional code was the essence of dignity and he was always defending and upholding the highest ideals of the profession.

In spite of his comparative youth—he died on 4 August 1950 in his 33rd year—he had the typical bearing, solidarity and kindness of nature which is so characteristic of his older Scottish colleagues. Ray Fyvie ever remembered his teachers from Edinburgh, and they were always a source of inspiration to him.

To the Local Health Commission in Maritzburg Fyvie's loss will not easily be forgotten and his beloved Maritzburg will be sad for the loss of him.

To his wife and child I and all who knew Dr. Fyvie wish to express our profound grief and sincere sympathy.

A colleague has gone. Of his nature there are few, and he was one we could ill afford to lose.

H. Bernstein.

Health Department,
P.O. Box 35,
Vereeniging.
15 August 1950.

PASSING EVENTS

We regret to record the death of Dr. S. F. Silberbauer. Obituary appreciation notices have been received and will be published in the near future.

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The next meeting of the South African Medical and Dental Council will be held in the Senate Room, University of the Witwatersrand, Milner Park, Johannesburg, beginning on Monday, 11 September 1950, at 10 a.m.

General Practice and Exemption from Clinical Specialist Training

The *Government Gazette* of 11 August 1950 (Notice No. 1947) announces the addition of the following further note under the specialities 'Medicine', 'Surgery', 'Obstetrics and Gynaecology', 'Dermatology' and 'Venereology':—

'Note.—It must be understood that exemption from clinical specialistic training on the ground of having been in general practice or having had hospital experience for three years or longer can only be considered if the three years were in addition to the two years' general practice prescribed in regulation 8 (c).'

Accessions to the Medical Library: Mowbray, C.P.

The Medical Library accession lists for the first half of this year are now complete. Members of the Association who desire a copy should write to the Assistant-in-charge, Medical Library, Medical School, Mowbray, C.P.

The G.M.C. and the Right of Appeal

In a recent editorial on the new Medical Act the *British Medical Journal* (5 August 1950, p. 337) states: 'The two most important changes proposed were the establishment of a disciplinary committee and the granting of the right of appeal.'

On page 338 of the same issue the editorial goes on to say: 'Most important of all, there will in future be an appeal from a decision of the G.M.C. to erase the name of a pactitioner from the *Register*. This appeal will be to the Judicial Committee of the Privy Council and must be entered within 28 days. The G.M.C. may appear as a respondent, and the appeal can rest on points of law or on points of fact'.

The same editorial states: 'The new Disciplinary Committee is to consist of 18 members and the President, though for most cases only nine members will sit. Six of the 18 and two of the nine acting in this capacity are to be directly elected members; five will form a quorum. Only a simple majority is required for any decision (which might mean a majority of three to two), and a respondent, when a charge is not proved, is now entitled to a verdict of "Not Guilty". The Disciplinary Committee is to sit with a legal assessor, and if he gives any ruling the parties to the case are entitled to be made aware of that ruling.'

It is interesting to note that there is a right of appeal from the findings of a Medical Council of 47 members whose decisions may be based on the report of a Disciplinary Committee which may consist of up to 19 members.

Leukemia Prize

An international competition for the best published paper on acute leukemia and allied conditions is being sponsored by a private foundation in the United States. The Robert Roesler de Villiers Foundation of New York City, named after a gifted boy who died of acute leukemia in 1944, is offering a prize of $500 for the paper which, in the opinion of competent judges, makes a significant contribution to the knowledge and cure of this fatal blood disease.

The judges will be Dr. Albert Adler (Zurich University, Switzerland), Dr. William B. Castle (Harvard University, United States), Dr. Jan Waldenstroem (University of Uppsala, Sweden) and Dr. Maxwell M. Wintrobe (University of Utah, United States). The judges are authorized to increase the award to a maximum of $1,000 if they consider the winning paper to be of outstanding importance.

The competition is open to the citizens and residents of all countries. Papers must be received not later than 30 April 1951.

REVIEWS OF BOOKS

The Rheumatic Diseases

The Rheumatic Diseases. By G. D. Kersley, M.A., M.D. (Cantab.), F.R.C.P. (London), T.D. (Pp. 143 + xiii. With 55 illustrations. 15s. Third edition, 1950.) London: William Heinemann, Medical Books, Limited.

Contents: Preface to Second Edition. Preface to Third Edition. Foreword by Sir Francis R. Fraser. 1. Introduction. 2. The Rheumatic Diseases, Their Etiology and Inter-Relationship. 3. Endocrinology and Histochemistry in the Rheumatic Diseases. 4. Rheumatic Fever. 5. Rheumatoid Diseases, Still's Disease and Climacteric Arthritis. 6. Specific Infective Arthritis. 7. Conditions Stimulating Arthritis. 8. Osteo-Arthritis. 9. Spondylitis. 10. Gout. 11. Fibrositis. 12. Sciatic Pain. 13. Special Treatments. Bibliography. Index.

This book deals very concisely with its subject. It makes no pretence at being a textbook but provides a general survey of the rheumatic diseases. It puts into perspective the various diseases. In order to avoid bulk, the clinical descriptions are necessarily brief, but they are very accurate and are illustrated with many diagrams, pictures and X-ray prints. A very successful part of the book is a section dealing with treatment, which is ample and detailed. This applies particularly to methods of physical therapy.

In this, the third edition of the book, a completely new chapter has been added on the endocrinological and biochemical aspects of rheumatic diseases. It deals with the adrenocortical hormones and gives a summary of what is known about cortisone and A.C.T.H. All this new work is very ably described and its possible significance discussed.

There is a special chapter on sciatic pain and another on fibrositis. In dealing with fibrositis the author takes the usual British view that it is a clinical entity as opposed to the general American view that it is a manifestation of some form of hysteria.

The book is up-to-date, well written and illustrated, and admirably compact. Its practical approach should prove useful to the general practitioner.

Obstetrical and Gynaecological Pathology

Essentials of Obstetrical and Gynecological Pathology. By Robert L. Faulkner, M.D., F.A.C.S. and Marion Douglass, M.D. (Pp. 400, with 300 illustrations including three colour plates. South African Price £3 14s. 6d.) St. Louis: C. V. Mosby Company. Second edition 1949.

Contents: 1. The Surgical Specimen. 2. Elementary Histology. 3. The Vulva. 4. The Vagina. 5. The Cervix. 6. The Endometrium. 7. The Myometrium. 8. Endometriosis. 9. The Fallopian Tube. 10. The Ovary. 11. Pregnancy.

In their preface the authors state their aim in this book: 'Now, as in the past, there are a great many students of obstetrical and gynecological pathology who do not pretend to be pathologists and who will have no lasting interest in the subject. They must be taught as much as possible, sometimes in large groups, and without too great a sacrifice of the instructor's time and energy. Many of these are long out of medical school and have had no recent contact with histology or pathology. Such students need a relatively simple and unadorned text.' This must be borne in mind when assessing the value of the book. The simple textbook is by no means the easiest to write. Apart from an ability to state things clearly it is necessary to go to the core of the matter, to give essentials, to place facts of lesser importance in their proper perspective and to omit those of least importance. The authors have not succeeded fully in these respects.

The book deals with the surgical specimens indicating how to cut and treat the material removed; elementary histology which would have been more effective had it been simply illustrated; diseases of the vulva, the cervix, the endometrium, the myometrium, the fallopian tube and the ovary with a full and good description of ovarian tumours. In each chapter there is a short account of the normal anatomy and histology of the part. In addition there is a chapter on endometriosis, very beautifully illustrated, and an excellent chapter on pregnancy giving a detailed account of lesions of the placenta, hydatidiform mole and chorion-epithelioma.

A few statements are not clear. For example in the chapter on diseases of the vulva: 'Other very rare tumours are . . . aberrant breast tissue'; 'Carcinoma of the vulva is 2% as frequent as carcinoma of the cervix.'

The book is well printed and the illustrations are excellent, but unfortunately they are not always adequately referred to in the text.

PYE'S SURGICAL HANDICRAFT

Pye's Surgical Handicraft. Edited by Hamilton Bailey, F.R.C.S. (Eng.). (Pp. 724 + xii. With 830 illustrations. 25s. 16th Edition. 1950.) Bristol: John Wright and Sons Limited. London: Simpkin Marshall Limited.

Contents: 1. The Arrest of Haemorrhage. 2. Resuscitation. 3. Bandages and Bandaging. 4. Bandages and Bandaging: Adhesive Plaster Technique. 5. Hollow-Needle Technique in Injection Therapy. 6. The Administration of Sera. 7. Saline and Other Infusions. 8. Blood Transfusion and Plasma Infusion. 9. Sulphonamide Therapy. 10. Penicillin Therapy. 11. Pre-Operative Medication and Basal Narcosis. 12. General Anaesthesia. 13. Intravenous Anaesthesia. 14. Examination of the Urine. 15. Preparation for Operation. 16. Preparation of the Diabetic Patient for Operation. 17. Transnasal Gastric, Duodenal, and Intestinal Intubation: Technique and Uses. 18. The Administration of Enemata. 19. Assisting at Operations. 20. Repair of Operative Incisions. 21. Newer Methods of Dressing Wounds: Factors in Wound Healing. 22. Prescribing Sedatives, with Special Reference to Post-Operative Medication. 23. Post-Operative Pulmonary Complications. 24. Post-Operative Breathing and Other Exercises. 25. The Clinical Use of Anticoagulants. 26. The Management of Head Injuries. 27. The Management of Hare-Lip and Cleft Palate Cases. 28. The Management of Thyroid Cases. 29. The Management of Surgical Thoracic Cases. 30. The Management of Gastric Cases. 31. The Management of Gall-Bladder and Pancreatic Cases. 32. The Management of Lower Abdominal Cases. 33. Renal Function Tests. 34. The Management of Renal Cases. 35. Catheters and Catheterization. 36. The Management of Bladder and Prostatic Cases. 37. The Management of Rectal Cases. 38. The Management of Gynaecological Cases. 39. The Management of Some Complications after Abdominal Operations. 40. The House Surgeon in the Radiological Department (I). 41. The House Surgeon in the Radiological Department (II). 42. The Use of X-Ray Apparatus by House Surgeons and Practitioners. 43. The House Surgeon in the Pathological Department. 44. The Treatment of Burns and Scalds. 45. Some General Principles in Minor Operations. 46. Minor Operations on the Male Genital Organs. 47. Minor Ano-Rectal Operations. 48. Gynaecological Procedures and Minor Operations. 49. Minor Operations and Other Procedures which Concern the Feet. 50. The Treatment of Abscesses. 51. The Treatment of Carbuncles and Bed-Sores. 52. The Treatment of Infections of the Hand. 53. Wounds of the Hand and Fingers. 54. The Treatment of Varicose Veins and Ulcers. 55. Medical 'Operations'. 56. Vaccination. 57. Lumbar Puncture and Allied Procedures. 58. Operations upon the Tonsils. 59. The Nose and Nasal Accessory Sinuses. 60. The Larynx. 61. The Ear. 62. The Eye. 63. Emergency Dental Treatment. 64. The Skin. 65. The Treatment of Gonorrhoea. 66. The Treatment of Syphilis and Chancroid. 67. The Treatment of Bruises and Sprains. 68. Treatment by Manipulation. 69. Plaster-of-Paris Technique. 70. Emergency Treatment of Fractures. 71. The Treatment of Wounds and Compound Fractures. 72. General Principles in the Treatment of Fractures. 73. Complications of Fractures. 74. Fractures and Dislocations of the Upper Limb. 75. Fractures and Dislocations of the Bones of the Face, Spine, and Pelvis. 76. Fractures and Dislocations of the Lower Limb. 77. The Treatment of Tuberculosis Joints. 78. Ordering Surgical Appliances and Splints. 79. The Treatment of Acute Poisoning. 80. Medico-Legal Reports. 81. Assessment of Incapacity. 82. The Relationship of the House Surgeon to his Chiefs, his Patients and the Nursing Staff. 83. Hospital Administration. 84. Certification of Death and Reporting to the Coroner. 85. Death Certification in Scotland. Conversion Tables. Index.

Like all the other books published by the author, who is noted for the simplicity and clarity of his writing, this book is no exception. *Pye's Surgical Handicraft* has always been widely read by medical students and practitioners, but the present edition will prove even more popular. The most pleasant aspect of the book is the beautiful illustrations of which there are more than 800.

Several pictures are in colour and have been carefully selected.

The book covers every aspect of surgery and deals briefly with the everyday problems and difficulties which will confront the newly-qualified house surgeon or physician.

The practical aspect of surgery is dealt with chiefly and chapters on assisting at operations, and pre-operative and post-operative procedures will be of inestimable value to the young trainee. Excellent chapters on intravenous infusion, the use of the latest antibiotics and laboratory aids have been included.

Minor orthopaedic procedures have been discussed by Watson-Jones and various specialities are represented by well known authorities.

As the name implies, *Pye's Surgical Handicraft* will appeal to the practically minded. There are some excellent illustrations of modern appliances and instruments and a brief description of their use.

The paper is of excellent quality and the print clear and easily legible. It is the kind of book which should be in the possession of all medical men but can be recommended most strongly to the young house surgeon.

DEVELOPMENTAL PSYCHOLOGY

Psychology and Mental Health: A Contribution to Developmental Psychology. By J. A. Hadfield, M.A. (Oxon.), M.B., Ch.B. (Edin.). (Pp. 444. 18s.) London: George Allen and Unwin Limited.

Contents: *Part I*: *General*. 1. Introductory: The Scope of Mental Health. 2. The Sources of Behaviour. 3. Types of Character Traits and Delinquency. 4. The Psychoneuroses Biologically Considered. 5. General Aetiology of the Psychoneuroses.
Part II: *Clinical*. 6. Psychosomatic Disorders. 7. Traumatic Neurosis. 8. Hysteria. 9. Anxiety States. 10. Anxiety Hysteria. 11. Obsessional Neuroses. 12. Clinical Obsessional Types. 13. Disorders of Personality. 14. Sex Perversions and Aberrations. 15. Clinical Types of Sex Disorder.
Part III: 16. Technique and Treatment

The author has written this book in language which, although accurate, is suitable for the teacher and parent as well as the doctor. The young practitioner will find helpful the numerous definitions so useful in dealing with this subject. The more experienced doctor, on the other hand, may find his approach to the problem of mental health of interest. The author defines mental health as 'the full and free expression of all our native and acquired potentialities, in harmony with one another by being directed towards a common end or aim of the personality as a whole'. Other standards of mental health are quoted and criticized.

The author's personal views on the various different schools of psychology are also set out. He himself belongs to no specific school of psychopathology. The early causes of the disorders discussed, occurring so frequently in childhood, and the importance of dealing with these early aberrations in order to prevent them from developing into full blown neurotic disorders, are stressed.

In each chapter full consideration is given to the therapy which should be applied to prevent the unnecessary development of the more serious disorders. Many interesting case histories are also included in order to illustrate clearly the various conditions described. The chapters on the various types of sex disorders are particularly well set out and should be of great use to those having scanty knowledge of the subject, and seeking guidance.

THE LIVER

The Liver: Porta Malorum (The Gateway to Disease). By Kasper Blond, M.D. (Vienna), L.R.C.P., L.R.C.S. (Ed.), L.R.F.P.S. (Glas.) and David Haler, M.B., D.C.P. (Lond.). (Pp. 268 + vii. With 36 illustrations. 25s.) Bristol: John Wright and Sons Limited. London: Simpkin Marshall Limited. 1950.

Contents: 1. Vasa Privata and Vasa Publica. 2. Physiology of the Extrahepatic Bile-Ducts. 3. A Critique of Current Experimental Methods for the study of the Function of Bile-Ducts. 4. Pathology. 5. Portal Hypertension. 6. Jaundice as a Sign of Portal Hypertension. 7. Relation of the 'Vicious Circle' Post Gastroenterostomy to the Jejunal Peptic Ulcer. 8. Appendicitis. 9. Pancreatitis. 10. Aetiology of Bright's Disease. 11. Angina Pectoris. 12. Bronchial Asthma and Toxic Goitre. 13. Portal Hypertension and the Toxaemic Syndrome of Pregnancy. 14. Haemorrhoids. 15. Spontaneous Thromboses in the Rectal Veins. 16. Periproctitis and Fistula-in-ano. 17. Ano-Rectal Mucosal Prolapse and Varicose Veins of the Leg. Bibliography. Index.

If the authors set out to shock their readers, they have certainly succeeded. Their style suggests that they have a message for the medical world; this reviewer doubts whether they will get many adherents. In the introduction they 'strongly plead for the establishment of medicine as a science', but it is difficult to discern such a healthy attitude in their theories which aim at explaining such diverse diseases as varicose veins, *fistula-in-ano*, asthma and angina pectoris, to name but a few, upon the common basis of hepatic intoxication with resultant portal hypertension.

They show expertness in detecting the weakness of many current theories. Their criticism of the morphological approach, were it toned down somewhat, would find some adherents; it is a pity, however, that they failed to apply the same critical insight to their own theories. These are built round the anatomical connections between the systemic and portal venous systems. Hypothetical toxins invade the liver and cause portal hypertension. This in turn leads to the opening up of anastomoses between the two systems, reversal of flow, and allows toxins which had failed to pass through

the liver and thus become detoxified, to flood various organs and cause disturbance of their function. Varicose formation and thrombosis of related branches are complicating features responsible for certain manifestations.

All forms of peptic ulceration are due to spasm which in turn is a result of portal hypertension, flooding with metabolic toxins and thrombosis of the gastric and/or epiploic veins 'analogous to that seen after venous thrombosis in other sites, e.g. rectum and leg'. Appendicitis is due to thrombosis of the appendicular vein, and cholecystitis of the cystic vein. Nephritis results from the opening of portacaval shunts and flooding of the kidney by metabolic toxins which had by-passed the liver. This explains why uraemia and cholaemia are in fact one and the same condition. Angina pectoris is a pain felt along vascular trunks and is caused by congestion of the coronary veins ultimately attributable to portal hypertension.

It is not possible to refer to every condition attributed to this mechanism; the list of chapters is an indication. The theory is not based on experiment or careful, controlled observation. It is based on argument and illustrates well the trap into which one may fall when an idea is stretched beyond the limits of elasticity.

HANDBOOK OF OBSTETRICS AND GYNAECOLOGY

Handbook of Obstetrics and Diagnostic Gynecology. By Leo Doyle, M.S., M.D. (Pp. 240. With 45 figures. First edition, 1950. $2.00.) Palo Alto, California: University Medical Publishers.

Contents: *Section I*: *Obstetrics*. 1. Diagnosis and Length of Pregnancy. 2. History and Physical Examination. 3. General Instruction to the Pregnant Patient. 4. Emotional Aspects of Pregnancy. 5. Minor Symptoms of Pregnancy. 6. Alleviation of Pain in Labor. 7. Labor and Delivery. 8. Delivery in the Home. 9. Puerperium. 10. Induction of Labor at or Near Term. 11. Abortion. 12. Ectopic Pregnancy. 13. Bleeding after the Fourth Month. 14. Premature Labor. 15. Placenta Pervia. 16. Premature Separation of Normally Implanted Placenta. 17. Toxemias of Pregnancy. 18. Rh Factor. 19. Hydatid Mole and Chorionepithelioma. 20. Hydramnios (Polyhydramnios). 21. Abnormal and Prolonged Labor. 22. Multiple Pregnancy. 23. Asphyxia Neonatorum. 24. Postpartum Hemorrhage. 25. Retained and Adherent Placenta. 26. Abnormalities of the Placenta and Cord. 27. Lacerations of the Childbirth Canal. 28. Rupture of the Uterus. 29. Inversion of the Uterus. *Section II*: *Diagnostic Gynecology*. 30. Menstrual Physiology. 31. Increased Menstrual Flow. 32. Dysmenorrhea. 33. Amenorrhea and Decreased Menstrual Flow. 34. Menopause. 35. Leukorrhea. 36. Pelvic Infections. 37. Diagnosis of Pelvic Masses. 38. Infertility Management. 39. Endometriosis . 40. Adenomyosis. Index. Abbreviations Used in This Handbook.

It is often convenient for the young practitioner as well as the undergraduate student to have available in concise pocket-book form the essential abstracts of obstetrics and gynaecology. For this very limited purpose the author's handbook should fulfil a useful function.

It is not claimed that this volume is a textbook or a reference book; if this is borne in mind, the young doctor who invests in it, will not be disappointed.

Particularly informative and attractive are the numerous line drawings which illustrate the volume.

THE MEDICAL ANNUAL

The Medical Annual. A Year Book of Treatment and Practitioner's Index. Edited by Sir Henry Tidy and A. Rendle Short. (Pp. 448 with 50 illustrations.) Bristol: John Wright & Sons Ltd. 1949.

Contents: 1. Contributors and their Contributions. 2. List of Plates. 3. Publishers' Note. *Part I. Review of the Year's Work*. 4. Introduction by the Editors. 5. Review. *Part II. Miscellaneous*. 6 New Preparations and Appliances. 7. Books of the Year. 8. General Index.

This Medical Annual keeps to its usual pattern although there have been several changes in the contributors to various sections. It is unavoidable that by this time opinions expressed in some sections, reviewing articles of 1948, are already out of date. For instance, the new concepts of the pathogenesis of Hirschsprung's disease are not mentioned, nor has cortisone yet appeared.

In a book of this type it is difficult to pick out particular sections for comment, most of which are really too short other than to whet the appetite for further knowledge. Mr. Tanner's survey of the effects of vagal resection for peptic ulcer is particularly good, and the summary of Dr. Bank's Milroy lectures on *Meningococcaemia* is fairly complete. There is a good section on malaria in which Dr. Manson-Bahr traces the development of research into the exo-erythrocytic phase of the cycle.

Other sections particularly worth noting are those on pulmonary bilharziasis, coarctation of the aorta, Kaposi's varicelliform eruption, the surgery of carcinoma of the rectum, and aberrant goitres. Of the illustrations the most noteworthy are Dr. Barclay's photographs obtained by the technique of micro-arteriography.

PERSPECTIVES IN NEUROPSYCHIATRY

Perspectives in Neuropsychiatry. Edited by Derek Richter, M.A., Ph.D., M.R.C.S. (Pp. 236, with 11 illustrations. 15s.) London: H. K. Lewis & Co., Ltd. 1950.

Contents: 1. The Anatomical Perspective in Neuropsychiatry. 2. Anatomical Lessons from Prefrontal Leucotomy. 3. Neural Nets and the Integration of Behaviour. 4. Electroencephalography as an Instrument of Research in Psychiatry. 5. Features in the Electro-physiology of Mental Mechanisms. 6. The Cerebral Mechanisms of Intelligent Action. 7. The Biochemistry of Cerebral Function. 8. Perspectives in the Endocrinology and Pathophysiology of Mental Disturbances. 9. The Concept of the Schema in Neurology and Psychiatry. 10. The Relationship of Mind and Matter to Personality. 11. Perspectives in Psychiatric Genetics. 12. Forensic Psychiatry: Retrospect and Prospect. 13. Aims and Methods of Treatment. 14. Mental Hospital Problems. Index.

It has long been a happy custom, especially on the European continent, to honour a great scientist and teacher reaching the end of his career with a *Festschrift*, a work compiled by his past pupils and associates that covers the field of interest of the doyen and which will comprise a living tribute to a revered master. It is pleasing to notice the introduction of this gracious gesture in other parts of the world and not only is this present volume welcomed because it honours Professor Golla, who has done much to advance the science and art of neuropsychiatry in Great Britain, but it also has very great intrinsic merit and offers to the reader, within a comparatively small compass, a most useful review of basic perspectives in neuropsychiatry available to the expert only by careful reading of a vast literature, and to the rest of the profession probably completely unknown.

The most recent work in anatomical, electrophysiological and biochemical research is very competently surveyed and the lines of future work indicated. It is all of fascinating interest and so pregnant with possibilities of future knowledge that it requires to be read not only by every neuropsychiatrist but by every member of the profession, and perhaps especially by the young medical scientist who might well be encouraged by it to enter a field that has for so long been neglected and which is only now beginning to emerge as a scientific discipline.

Unlike most volumes of multiple authorship, this is of practically uniform excellence except only for two chapters: the one on *The Relationship of Mind and Matter to the Personality* because it is too vague and prolix and ends on a religio-mystic note that does nothing to convince the reader; and the other on *Aims and Methods of Treatment* which is too empirical and uncritical to impress though it may have some practical usefulness for the uninitiated.

The editor and his contributors are to be congratulated on an excellent work and Professor Golla must indeed be happy and proud to have inspired it.

PARASITOLOGY

Precis de Parasitologie. Parts I and II. By E. Brumpt. (Pp. 2,138, with 1,305 figures. 7,700 Francs.) Sixth Edition. Paris: Masson et Cie. 1949.

The principal object of this work, says Professor Brumpt, is to study the biology of parasites, their mode of destruction and the diseases they cause or transmit, so that they may be countered at every stage of their existence.

Scientific study of parasites began only 60 years ago and the rate of progress in this branch of medicine is illustrated in the great expansion of this latest edition over the last which appeared in 1936. The new material includes (to

mention only a very few subjects) the role of arthropod vectors as established by experimental work; identification of various recurrent fevers caused by spirochaetes; rickettsial diseases; prophylaxis and treatment of bilharziasis; the use of the new insecticides; life cycles, hitherto undiscovered, of certain parasites, etc.

In the field of treatment the only major omission, for obvious reasons, is any mention of the antibiotics beyond streptomycin.

Brumpt's *Parasitologie* needs no recommendation for the pathologist to whom it has long been a standard reference, but the clinician in every field would find it of the greatest value. The writing is clear and interesting in style and many of the original photographs, taken by the author on his travels, are unusual and diverting.

CORRESPONDENCE

NOT SO FUTILE RADIOLOGICAL PROCEDURES

To the Editor: Having carefully perused and pondered G.P's. letter, a justifiable answer would be his own advice: 'As for G.P. my advice would be for him to keep out of the argument', but as he appears to have the same difficulty as 'Clinician' in this regard, it is accepted that G.P. may have entered the argument for a similar reason, to wit, the free right of the individual to express his considered opinion.

With regard to the E.N.T. specialists' denouement at Medical Congress it might, in the interests of fair play, be recalled that a certain lack of interpretational agreement by other E.N.T. specialists and radiologists was manifest at these congressional revelations.

Since Drs. Jacobson and Hirschon are, on 'G.P's.' own cognizances, better qualified to hold radiological opinions than G.P. is, the use of such emotional terminology as: 'How then can any radiologist venture', 'I am really astonished', 'Surely they must agree', will hardly be palatable currency in 'the science of experts'. It is to be hoped that G.P. will soon recover from his astonishment and realize that radiologists can 'venture' (as did Dr. V. Berman) and 'disagree' (as did the senior radiologists, Drs. Jacobson and Hirschon) without the rest of the medical profession being in any way afraid lest it succumb to that haunting lullaby 'false sense of security' when their patients go for their screen test.

Since the practising radiologist does not exist in a vacuum but in intimate relationship to other practising medical men and their patients, a mutuality of problems will be characteristic of, and inherent in this relationship. Accordingly, and by virtue of this, the expression of a considered opinion becomes the inalienable right of any medical man upon any topic which vitally concerns that relationship.

'Clinician'

16 August 1950.

COMPULSORY INTERNSHIP

To the Editor: In the *Journal* of 27 May 1950 you published a memorandum on the subject of Compulsory Internship, and I would like to bring to the notice of your readers that an error was inadvertently contained in the paragraph in the middle of page 405, column 1, beginning: 'Sub-section (b) of Section 34 . . .' The words in the third line, reading: 'except where these words occur for the second time', should read: 'except where these words occur for the third time', as the Amending Act (No. 13 of 1950) clearly states in Section 6 (b): 'by the insertion in paragraph (b) after the words "medical practitioner" where they occur for the first, second and fourth times, of the words "or intern", and by the substitution in the said paragraph for the words "or accoucheur" of the words "accoucheur or intern".'

It is regretted that this error occurred.

A. H. Tonkin,
Medical Secretary.

Medical House,
Cape Town.
24 August 1950.

THE MEDICAL COUNCIL AND THE RIGHT OF APPEAL

To the Editor: I have received for publication the following communication from the President of the South African Medical and Dental Council.

A. W. S. Sichel,
President,
Medical Association of South Africa.

Cape Town.
28 August 1950.

Dear Dr. Sichel,

An Editorial in the *South African Medical Journal* of 24 June 1950, deals with *The Medical Council and the Right of Appeal*. In this editorial, statements are made which are incomplete, inaccurate and misleading. As members of the medical profession have little or no access to the highly technical, legal and other documents on which the editorial is based, they may arrive at very wrong conclusions. I feel, therefore, that it is in the interests of the public and the professions that I draw your attention to the following facts.

The second paragraph of the editorial says: 'In recent years not only have disciplinary findings of the Medical Council been reversed by both the Provincial and the Appellate Divisions of the Supreme Court, but in certain of these judgments the Courts have remarked in passing that, even if the convictions had stood, the penalty imposed was too severe.'

This statement is inaccurate and extremely misleading. In point of fact, during the past 22 years only *two* disciplinary findings of the Council have been reversed by Provincial Divisions of the Supreme Court. Both these cases were later brought before the Appellate Division and in one of the cases the original decision of the Medical Council was confirmed. In other words, since the South African Medical Council was established 22 years ago, only *one* disciplinary finding of the Council has been finally reversed.

It is misleading to quote (in a footnote to the editorial) Mr. Justice Tindall in support of the statement that 'in certain of these judgments the Courts have remarked in passing that even if the convictions had stood, the penalty imposed was too severe'. Mr. Justice Hoexter made this statement in the case of S.A. Medical Council *v.* Lipron; the only case in which the findings of the Council were finally reversed. Mr. Justice Tindall, in the case of S.A. Medical Council *v.* McLoughlin, said that *speaking for himself* he thought a certain fee was not 'grossly excessive'. He said also that he would 'have felt easier about the matter if the tribunal had not held that this charge amounted to disgraceful conduct and in itself merited erasure of the respondent's name from the register'. Mr. Justice Tindall's exact statement is quoted in the footnote. But the editorial proper refers to 'the Courts' and omits to say that there is no evidence to show that the four other judges who were considering the McLoughlin case subscribed to Mr. Justice Tindall's personal opinion. The facts of the matter are that 'the Courts' (including Mr. Justice Tindall) confirmed the disciplinary findings of the Medical Council.

In the fourth paragraph of the editorial, it is stated that: 'at a meeting of the South African Medical and Dental Council held in March 1950, a proposal by a substantial minority of its own members to give a registered medical practitioner an ordinary and unrestricted right of appeal from any of the Council's findings in terms of the Medical, Dental and Pharmacy Act, was completely rejected. By this regrettable decision, the Medical Council set its course firmly against the democratic tradition of our profession, our country and our times.'

This statement is misleading and the use of the words 'substantial minority of its own members' may give a false impression of what happened at the Council meeting. The minutes of the meeting show that no dissenting vote was *recorded* against the Council's decision. The rules relating to the conduct of the business of the Council provide that 'if any member dissents from the opinion of the majority and wishes to have his dissent recorded, he shall state so forthwith; such dissent shall then be entered in the minutes'. This rule is well known and frequently made use of by members of the Council. While, therefore, I am unable to say what is meant in the editorial by the words 'substantial minority of its own members', I can tell you definitely that not even one member of the Council availed himself of the right of having a vote recorded against the Council's decision.

In paragraph five, it is stated that: 'In South Africa, the insistence on a right of appeal from the findings of Medical Councils or their equivalent goes back at least as far as 1894. The demand for this equitable right is, therefore, rooted in the traditions of the medical profession in this country.'

The evidence given in the editorial in support of this categorical and sweeping statement is a remark made in 1894 by one individual, a Dr. Herman of Cape Town. The editorial provides no evidence that Dr. Herman was recommending any different kind of appeal from that which was provided by the Act of 1928 and which exists to-day. By quoting Dr. Herman's opinions the editorial is misleading. Whether Dr. Herman's opinion is right or wrong, it is a gross exaggeration to suggest, on the basis of a statement made in 1894 by one individual, that a demand for a right of appeal from the findings of Medical Councils is 'rooted in the traditions of the medical profession in this country'. No suggestion was ever made when the Bill was before Parliament that the kind of appeal for which provision was made was unsatisfactory or inadequate.

The editorial then refers to the British Medical Bill of 1950. It states that 'in the very year in which our own (South African) Medical Council saw fit to turn down this reasonable principle (of "an ordinary and unrestricted right of appeal from any of the Council's findings"), a British Bill has been introduced which lays down machinery for appeals from decisions of the General Medical Council if a practitioner's name is to be struck off the Register'. The editorial omits, however, to say that the British Bill provides that appeals must be made 'in accordance with such rules as His Majesty in Council may by Order provide' and that the significance of this proviso is not yet clear. The Bill is not yet an Act of Parliament and the powers conferred by it cannot be fully assessed until its contents have been considered and tested out by British Courts of Law. It is misleading, therefore, to use this British Bill, the details of which are not yet fully known, as a basis for criticism of any actions taken by the South African Medical Council.

These inaccuracies are of a serious nature. Much more serious, however, is the fact that the editorial is based on the wrong assumption that in our Act two different forms of appeal are provided for in connection with:

1. A decision of the Council not to register a practitioner, and
2. A disciplinary decision of the Council.

The editorial says: 'Moreover, this right of appeal which we urge is not without precedent in the Act itself. In terms of Section 18 of the Act, if there is a dispute involving the registration of a medical practitioner, the aggrieved person may make an application to the Supreme Court.'

The editorial says also: 'We are at a loss to understand the Council's attitude in view of the fact that a right of appeal already exists in the Act itself in respect of registration. . . .

'The Council', says the editorial, in connection with *disciplinary* matters, 'has refused to agree to this minimum safeguard of an ordinary right of appeal'.

These statements are not merely misleading; they are entirely contrary to the facts. In the first place, it has been made clear by Mr. Justice Tindall, in the McLoughlin case, that nowhere in our Act is an 'ordinary right of appeal' either provided for, or practicable. He said: 'It must be remembered that the tribunal in question (the Medical and Dental Council), though established by statute and empowered to summon witnesses and to examine them on oath, is not a court of law but a professional body acting in a quasi-judicial capacity. And, as will be shown later, *no ordinary right of appeal lies to a court of law against the decisions of such a body.*'

Later, Mr. Justice Tindall says: 'The exercise of appellate jurisdiction in the case of the findings of a body which consists of a large number of members—in this case 28—and which does not give reasons *would hardly be practicable*, and the Legislature could not have intended to confer such jurisdiction.'

Secondly, the form of appeal to the Courts contained in Section 18 (*and which the editorial 'urges' on the Council*) is precisely the form of appeal which has existed in Section 42 (5) since 1928, and which the Council at its last meeting declared satisfactory. The editorial has completely misrepresented the meaning of Sections 18 and 42 (5) of the Act. It is necessary, therefore, for me to give you the facts concerning these two sections.

Section 18 deals with the remedy of a person who is aggrieved by either a *refusal* on the part of the Medical Council *to register him*, or by the *erasure of his name from the register*. The Section states that such person may make application to any provincial or local division of the Supreme Court. When the application comes before the Court: 'The Court may dismiss such application, or, if it is of opinion that the Council has not acted in accordance with the provisions of this Act, may make an order for the enrolment on the register of the applicant's name or any other particulars as aforesaid, or may remit the matter to the Council for further consideration or make such other order as to costs or otherwise as may to it seem just.'

Section 42 (5) deals with the remedy of a person aggrieved at the finding of, or penalty imposed by, the Council for a *disciplinary offence*. The Section states that such a person may also apply to any provincial or local division of the Supreme Court. (The words used in this Section and in Section 18 are identical, namely: 'an application may be made to any provincial or local division of the Supreme Court by any person aggrieved. . . .') Continuing, Section 42 (5) states that when the application of the person aggrieved by a disciplinary finding comes before the Courts: '*the provisions of Section 18 shall, as far as possible, apply to such application*, but the proceedings of the Council shall not be set aside by reason only of an informality which did not embarrass or prejudice the applicant in answering the charge or in the conduct of his defence.'

Furthermore, in the case of Section 42 (5), *as in the case of Section 18* (quoting Mr. Justice Tindall in the disciplinary case of McLoughlin *v.* S.A. Medical Council): 'The court may dismiss the application, or if it is of opinion that the Council has not acted in accordance with the provisions of the Act, it may set aside the proceedings or remit the matter to the Council for further consideration.'

The only subject omitted by Mr. Justice Tindall in this summing up was the subject of costs. The jurisdiction of the Court in this matter is, however, clearly shown by the fact that in the McLoughlin case, as in many other cases, the Court awarded costs.

In other words, Section 42 (5) gives an applicant exactly the same redress in connection with alleged disciplinary offences as Section 18 gives in connection with registration. In both cases, the right of application is the same; the procedure is the same and the Courts have the same powers. And it should be noted that, in both cases, those powers are powers of *review*.

Disregarding this fundamental fact, the editorial has nothing but good to say about the form of appeal which exists in the case of the Council's refusal to register a practitioner and nothing but bad to say about what it, incorrectly, assumes is a different form of appeal in connection with disciplinary findings of the Council. Some further quotations from the editorial will clearly illustrate this: 'In other words, the right of appeal gives an accused person virtually the right to a completely new trial by a different court. The right to take a quasi-judicial decision on review, which is now the only legal remedy left to the doctor found guilty of an offence by the Medical Council, can be invoked only on certain technical and very circumscribed grounds. He can never have his case re-tried. The courts reviewing the matter will not consider the merits of the original case or the rightness of the verdict arrived at on the evidence.'

In another part of the editorial, the right of appeal is described as 'an elementary principle of justice'. The right of review is described as: 'a very attenuated privilege that a practitioner retains and he may very well experience a dubious pleasure in such a possession'.

The facts about an appeal and a review, as these have been set out in our courts of law, are as follows:

In the case of Groenewald *v.* the Medical Council, the case on which all subsequent judgments on the subject are founded, Mr. Justice de Wet, who later became the Chief Justice, said: 'A great deal of argument was addressed to us on the question whether this is an appeal or a review . . . a review is brought against the proceedings of an inferior judicial body and an appeal is brought against the decision, finding and penalty. That, however, does not conclude the matter, because it seems to me that it may be *immaterial whether we call it a review or an appeal*. As pointed out in the case I have already referred to, *a review may give as wide or even wider powers than an appeal. Everything depends upon the terms of the statutes under which the review is given.*'

Mr. Justice de Wet then proceeded to consider the relevant Sections of our Statute, i.e. the Medical, Dental and Pharmacy Act of 1928, with the object of seeing how 'wide' are its terms. He then said: 'This Section gives the court *very wide*

powers'. Mr. Justice de Wet also pointed out that in both Section 18 and Section 42 (5) of our Act, the words 'Application' or 'Apply' are used and not the word 'Appeal'. With reference to these words, he said: 'I am prepared to assume for the purpose of this case that the powers of review given by way of application are as wide as an appeal and enable the court to go into the matter as fully as if there were *an appeal from the finding of the Council and from the penalty imposed by the Council*.'

According to Mr. Justice de Waal, in the same case: 'The Council as constituted under the Act, consists of 25 members, professional as well as lay, and the legislature has wisely, in my view, left it to the Council to decide what acts or omissions should in their opinion render a member of their profession liable to punishment. They are the custodians of the honour and rectitude of the profession, it is left to them to say to what standard of honour the members of the profession should conform, and much depends upon their opinion whether the standard of personal and professional honour of its members is a high one or not. Where, therefore, in their opinion, the conduct of a member is a fit subject for enquiry and punishment, *a court of law should be slow indeed to substitute its opinion for that of the Council*. On the contrary, where it is found that the Council have enquired into and inflicted punishment for conduct which, in their collective opinion, they deem to be improper or disgraceful, and there is nothing to suggest that their opinion was come to unreasonably, and there is nothing moreover to show that in coming to a conclusion they acted capriciously or *mala fide*, the court should not interfere. Indeed, under the circumstances as set out above, the court declines to substitute its opinion of what is improper or disgraceful conduct for that of the Council. *And it seems to me fit that it should be so*. It depends largely on the Council whether members of the profession maintain a high degree of moral and professional rectitude or otherwise. *And of that the Council are the best judges*.'

Mr. Justice de Waal concluded his judgment in the Groenewald case with these words: 'It seems to me, therefore, that where the Council has come to the conclusion that an act committed by a doctor is, in its opinion, improper or disgraceful, and the court finds that this opinion was not unreasonable, regard being had to all the circumstances surrounding the commission of the act, the court sitting as a court of appeal will not interfere. The only function of the court, as a court of appeal, then is to enquire whether the record discloses facts which sufficiently prove the act complained of. The Council's opinion, in my view, then, reasonably given, as to what is improper or disgraceful conduct, is final and binding. In the result, therefore, we have come to the conclusion that: whether the matter comes before us by way of review (and there are strong grounds for holding that these are review, and not appeal, proceedings) or whether it comes before us by way of appeal, in either case the applicant (i.e. Groenewald) cannot succeed.'

Additional evidence of the satisfactory nature of the existing legal protection given to medical practitioners against incorrect disciplinary findings of the Council was provided in the case of Lipron *v.* the South African Medical and Dental Council. In this case, there were two counts of charging excessive fees. In the Provincial Division of the Supreme Court, Mr. Justice Blackwell found 'that on neither count was there evidence on which the Council reasonably could have found the accused doctor guilty of either improper or disgraceful conduct'. Mr. Justice Blackwell said also: 'Even if we are wrong on the *merits*, the Council ought not to have imposed more than a nominal penalty in this case'. The case was then taken to the Appellate Division of the Supreme Court. In that court, Mr. Justice Hoexter confirmed that 'there was no evidence' on which the Council could reasonably come to the conclusion that the respondent had charged excessive fees.

The redress given to Dr. Lipron, coupled with the statements made by the judges here quoted, refutes the allegation made in the editorial that under existing legislation 'the courts will not consider the merits of the original case or the rightness of the verdict arrived at on the evidence'. In all disciplinary cases both 'the merits of the original case' *and* 'the rightness of the verdict arrived at on the evidence' are fully considered and, in the case of Dr. Lipron, a verdict was given in favour of Dr. Lipron.

Finally, the editorial is incorrect when it says: 'The situation may have been obscure before the Appellate Court gave its judgment in the case of the South African Medical and Dental Council *versus* McLoughlin. The position, however, is obscure no longer, since following this judgment it is clear that no medical practitioner has a right of appeal from a finding of fact by the Medical Council *whether that finding be right or wrong*.'

The McLoughlin case has in no way altered the position. In fact, this case *confirms* the views expressed by the judges in the Groenewald case concerning the rights of a practitioner aggrieved by a decision of the Council. In the McLoughlin case, Mr. Justice Tindall refuted, at great length, arguments put forward by Advocate Kuper, K.C. (Advocate for Dr. McLoughlin) to the effect that the decisions in the Groenewald case were incorrect. The editorial appears to have mistaken this comment by Mr. Justice Tindall on Advocate Kuper's argument for a new and different judgment on the entire subject—an error that can be made if the judgment only, instead of the record of the entire case, has been studied.

Summarized, then, the facts are as follows:—

1. The type of appeal provided for throughout our Act is 'in the nature of a Review'.

2. A so-called 'ordinary and unrestricted right of appeal' is not 'practicable' in the case of a body constituted like the Medical Council and required by Statute to deal with the *ethical* code of a profession.

3. The review proceedings provided for in our Act 'enable a court of law to go as fully into the subject as if there were an appeal from the findings of the Council and from the penalty imposed'.

4. Both the merits of the case and the verdict arrived at by the Council on the evidence are fully considered by a court of law.

5. If the courts find 'that the Council have enquired into and inflicted punishment for conduct which in their collective opinion they deem to be improper or disgraceful, and there is nothing to suggest that their opinion was come to unreasonably . . . capriciously or *mala fides*', the courts will not interfere. On the subject of ethical conduct, the courts regard the Council as 'the best judges'.

6. If, as in the Lipron case, the courts find that there is 'no evidence on which the Council reasonably could find the accused doctor guilty of either improper or disgraceful conduct', they will set aside the findings of the Council and allocate costs as they think fit.

The foregoing picture is distinctly at variance with the statements made in the editorial. The editorial, you will remember, describes an appeal as 'an elementary principle of justice', and a review as 'a very attenuated privilege', and says: 'No medical practitioner has a right to appeal from a finding of fact by the Medical Council, *whether that finding be right or wrong*.'

It was with full knowledge of the opinions of our courts and judges and of the contents of the Medical Act that the Council decided at its last meeting that the existing laws in connection with appeals from disciplinary and other findings of the Council are satisfactory and should not be altered. It is significant that it has never been said, suggested or implied by our courts of law or our judges that the existing right of appeal, by way of review, is in any way inadequate or unsatisfactory. It is clear to the Council that any amendment of our Act which provided for an appeal against judgments of the Council concerning what is ethical and what is not ethical, would result in a court of law replacing the Council as the final judges of what constitutes improper or disgraceful conduct and of what is suitable punishment for such conduct. A court of law, not a body composed largely of medical men, would then become what Mr. Justice de Waal called 'the custodians of the honour and rectitude of the profession'. A court of law would thus be given the functions which Medical Councils were established and developed to perform.

The writer of the editorial is entitled to disagree with the opinions of the Council and of the learned judges—including an ex-Chief Justice—whom I have quoted. But I doubt the propriety of his telling the medical profession that a decision arrived at by the Council—and which he believes to differ from the editorial viewpoint—means that the Council has 'set its course firmly against the democratic traditions of our profession, our country and our times'.

The Council was set up by the State to protect the public and 'as the custodians of the honour and rectitude of the profession'. I attach profound importance to the work which the Council has been called upon by the State to perform. Anything that succeeds in undermining the authority or the influence of the Council must simultaneously deliver a blow

to the profession of medicine in South Africa, from which it may never recover.

I have dealt here in some detail with the editorial of 24 June. But I invite your attention also to the cumulative effect on South African medicine of the editorials which appeared in the following issues of the *S.A. Medical Journal*: 10 April 1948; 24 April 1948; 11 September 1948; 23 October 1948; 2 July 1949; 11 March 1950; 22 April 1950; 24 June 1950. I invite your attention also to letters, published under *noms-de-plume*, which are published in the *Journal*. A letter which appeared in the issue of 22 July asks for the names and views of members of the Council 'in order *to minimize* the danger of victimization'. By publishing this letter and providing the names of the members of the Council, the *Journal* has associated itself with the accusation of victimization.

I hope you may find it possible to bring the contents of this letter to the notice of the officers and members of your Association.

Yours sincerely,

K. Bremer,
President.

South African Medical and Dental Council,
P.O. Box 205,
Pretoria.
15 August 1950.

(Various passages from judgments quoted in this letter have been emphasized in italics by our correspondent. These passages were not so emphasized in the original judgments as published in the *South African Law Reports*.—Editor.)

THE FOUNDING OF A COLLEGE OF PHYSICIANS AND SURGEONS IN SOUTH AFRICA

To the Editor: In his report published in the *Journal* of 13 May 1950, Mr. Goldschmidt has put seven questions. Questions 1 and 2 read:

'Should a body or bodies, akin to the Colleges in Britain, be established in South Africa?' and

'Should one College to examine for all specialities be created, or should separate Colleges representing Medicine, Surgery, Obstetrics and Gynaecology, etc., be established?'

The answer is surely 'yes'. We seek an examining body which is apart from the Universities and which is more clinical than academic in character. It would seem that one joint College would be sufficient for South Africa's needs, but in order to avoid delay I would suggest that if there is any quibbling between the sections, the most go-ahead section should go ahead with its own College.

The third question reads: 'Should a College be independent of

i. The South African Medical and Dental Council,
ii. The Universities,
iii. The Medical Association of South Africa?'

Here again the answer is 'yes'. It should be run by practising men for practising men. Its object should be clinical study and examination and the maintenance of a high clinical standard. Close liaison should be kept up with all other medical faculties and associations. It will have to be guided by the South African Medical and Dental Council in the standard it sets in examinations. The Council will set down its requirements and should appoint referees to be present at the College examinations. It is probable that University men will serve on the Council of the College in their private capacities and a link with the Universities will be there in fact. It is probable also that all Members and Fellows of the College will be members of the Medical Association of South Africa, as the Association will continue to be the guardian of their many interests.

The fifth question reads: 'Should the College grant diplomas

i. Of a standard to register as a medical practitioner,
ii. A higher status, or
iii. Both?'

The answer must surely be 'both', as anything else will be only part of the work of the College. It must be remembered that the College must always place the emphasis on the *clinical*. It should be an obligation to pass the Membership examination before going on to a Fellowship examination. The entrance qualification for a Membership examination should be the holding of all the necessary 'duly performed' certificates necessary for an entrance to an M.B., Ch.B. examination, or the holding of that degree itself. The entrance qualifications for a Fellowship examination could well be the evidence of having had at least two years' post-graduate experience as a Member of the College. The examination for a Fellowship must be of a sufficiently high standard to be able to compare with any other Fellowship or similar clinical examination.

The sixth question asks: 'Should the College teach otherwise than by the provision of lectures, etc.?'

No, the College should not teach. Its main object should be to set and maintain a high *clinical* standard. This will be done mainly by its examinations. It will, of course, also provide periodic lectures on special subjects, possibly at a monthly meeting, and these should be fully reported in its published '*Transactions*'. Any teaching which the entrants for examinations might get should be received either from the Universities or from tutors at this stage, but naturally one of our aims must be the establishment of a Post-graduate Medical School which would have no close relationship with the College but would be run as a separate entity. Practitioners passing through such a Post-graduate Medical School might or might not take examinations, but, if they do take examinations, those open to them would be the examinations of the College.

4. 'How should a College be established

i. By Charter, or
ii. By the creation of a Company?'

If it is desired that the College should be known as a 'Royal College', a Royal Charter will be necessary. If that is not desired, one of the easiest and probably most flexible ways of establishing a College is by the formation of a non-profit-making Company. The affairs of the College would be in the hands of an elected Council, and its Constitution could be altered if necessary from time to time according to a set procedure. It is far more difficult to make alterations to a Constitution established under Charter.

The last of Mr. Goldschmidt's questions is: 'How should a College be financed?'

This seems to be the greatest stumbling block to most people. The reason is simple. Most people think of a College in terms of the Royal Colleges of England, Edinburgh or Ireland, and forget that they have been established for very many years. The fine buildings, library and museum of the Royal College of Surgeons of England have taken scores of years to build up—before that, nothing. They began with the foresight and enthusiasm of a few individuals who were interested in the *clinical*. At the beginning some cautious individuals probably said, 'Where is the money coming from?', but I am sure that the enthusiastic among them did not let this question cause them any anxiety.

What does one need at the beginning?—a group of enthusiasts who are willing to start something which will go on long after they are only memories and who will give to it a fair amount of time and some money. Next, someone with keenness and inspiration to act as Secretary, Registrar or Bursar, call him what you will, will be needed. He will require an office and clerical staff. Those are the immediate needs and will constitute the initial outlay.

Foundation Members should be limited to a certain number of recognized Fellows of one of 'the other Colleges' of, say, at least 15 or 20 years' standing, and they should pay into the Foundation Fund a sum of, say, 100 guineas each. Thereafter a further number of Fellows of other Colleges (or Members in the case of physicians) would be admitted as ordinary Members on payment of an entrance fee (say 50 guineas), no examination being necessary in their cases. This form of entrance would only apply to persons holding a Fellowship (or Membership) of another College prior to the establishment of the South African College, and would cease after the South African College is formed. Application for election to such membership would be open to such persons for two years after the formation of the South African College only—thereafter by examination, except in extreme cases where a Fellowship may be awarded *honoris causa*. At the beginning it would be necessary for the affairs of the College to be managed by an interim *ad hoc* committee, but once the question of membership has been settled the Fellows would proceed to elect a Council and the College could settle down to the conduct of examinations. These would bring in some income in the form of examination fees and admission fees, but it is possible that an annual subscription may be necessary.

Periodic lectures or orations follow, and the rest is progress.

A. H. Tonkin.

Cape Town.
28 August 1950.